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Chromatic Alteration in the *Missa L'homme armé* of Pierre de la Rue: A Case Study in Performance Practice

by

William Geoffrey Kempster ©

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in
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Abstract

Compared to the music of his contemporary, Josquin des Prez, the works of Pierre de la Rue are comparatively unknown to modern audiences. That this is music of the highest quality can hardly be doubted, however, and as more of his works become available in modern editions, it is to be hoped la Rue's music will receive the recognition deserves.

This thesis presents an edition for performance of la Rue's *Missa L'homme armé I* which particularly attempts to put forward an interpretation of the Mass in terms of the application of what has been called – perhaps often somewhat ubiquitously – *musica ficta.*

The thesis is structured in three parts: Part A gives an overview of practices associated with hexachordal solmisation, as well as the application of various theoretical conventions associated with *musica ficta;* Part B details how these practices have been applied in my edition; and Part C presents the edition itself. As this edition is one designed for performance by a modern mixed-voice chamber choir, the music has been transposed up a minor 6th from the pitch suggested by sources.

My research into *musica ficta* has attempted to blend Renaissance theoretical writings with actual performance-based experimentation, and in performing the music of not only la Rue, but also Josquin, Ockeghem, Brumel and others from this period, I have found the following general principals to be often applicable in this repertoire:

1. The soft hexachord B flat should be introduced in many more instances than is frequently observed in most modern editions.
2. Although both sub-semitone and supra-semitone cadential structures exist in this music, the former is more often called for than the latter. Further, these types of progressions should often be altered even if the progression is not of a strictly cadential variety.

3. Cadential tritones are common in this repertoire.
4. The "Tierce de Picardie" ending should be applied at final (and intermediate) cadences unless the part writing prevents this.
5. Cross-relations are a natural outcome of the operation of either hexachord choice or leading tone progressions, and should not be avoided as a matter or principle.

PREFACE

The complex polyphonic vocal music of particularly the 15th, but also the first part of the 16th century, represented the culmination of the first great stage in the development of Western Art Music. In particular, the music of the central Renaissance, up until approximately the death of Josquin in 1521, can be seen as the pinnacle of achievement in the development of this polyphonic tradition.

Music of this period was conceived in an environment fundamentally different from the one which has become moulded into the modern psyche; that is to say conceived within a *linear,* or melodic tradition, as distinct from existing within a firmly entrenched *vertical,* or harmonic one. Of course this is not to say that the concept of harmony was foreign to composers of this period; such composers were grappling with the elemental problems inherent in attempting to rationalise an essentially melodic tradition with a newly emerging harmonic language inconsistent with that tradition. Our knowledge of the conventions and practicalities of this music has been, and to a great extent remains, inadequate to truly do it justice.

For the modern performer, one of the most important practical ramifications of these factors is the issue of what the *actual pitches* in this music would have been, or what has somewhat misleadingly become known as the controversial matter of *musica ficta. Musica ficta* becomes an issue of paramount importance when trying to reconstruct any reasonable facsimile of the composer's original intention in light of period performance practice, as well as the theoretical writings of the time. The task is certainly impossible in one important sense: there are almost certainly a number of possible 'correct' versions of any one particular piece, and for this music the concept of a definitive or 'autograph' score, increasingly applicable in later music, is simply irrelevant.

It is not a matter of dispute that the music itself is fundamentally changed by these attempts to rediscover period practices. In the new edition of Pierre de la Rue's *Missa l'homme armé I*[1] I have prepared for the performances accompanying this thesis, over 300 of the actual pitches as they appear in the manuscript sources have been changed in an attempt to more closely reflect what I believe to have been the composer's intention. There can be no claim that this is the only way in which to perform this music; it seems to me quite clear, however, that not to make the effort is certainly one wrong way.

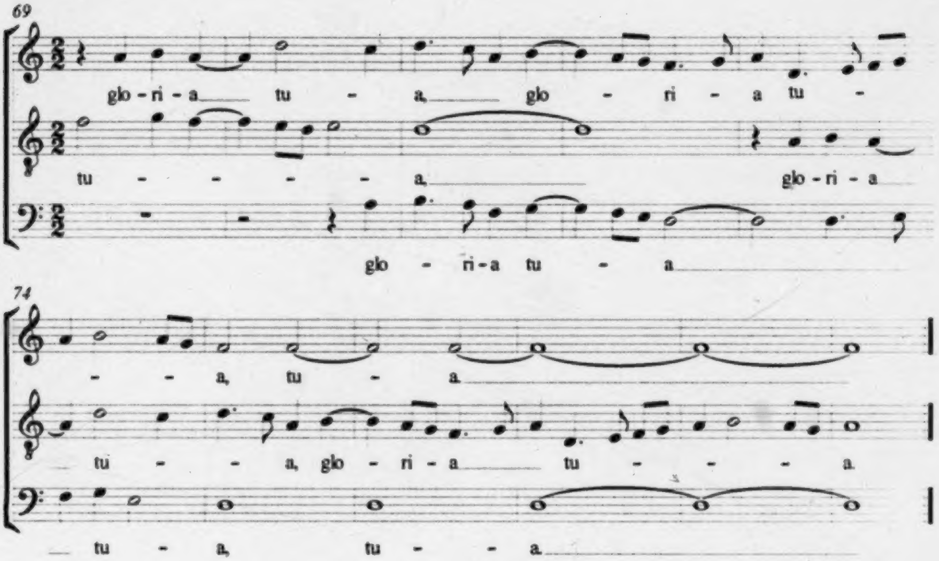
As will become clear in the pages which follow, in modern contemporary circles the term *musica ficta* has become regularly misused, especially by performers, who routinely equate the term with chromatic alteration of any type in this music. For the Renaissance musician, however, chromatic alteration could be of two general varieties: firstly, one associated with the application to both compositional and performance practice of a system of overlapping hexachords *musica vera,* or *recta;* and secondly that of *musica ficta,* which reached beyond the normal limits of the hexachordal system, but was still strongly associated with it, and which was also subject to a variety of 'rules,' which were fairly rigidly outlined - at least in theory. Thus in the pages which follow, the distinction between the terms 'chromatic alteration' and 'musica ficta' is essential in coming to some understanding of how this music worked in practice.

It is often difficult for a modern performer brought up in an environment in which the written score is imbued with absolute authority to conceive of a situation in which that authority might be less than complete. There are still some conductors of choirs - of all standards and abilities - who would look at the following passage, for example, and even perform it, without it ever occurring to them that some of the notes themselves might be wrong. Even more alarming is the possibility that these same musicians could consider passages such as this, from Pierre de la Rue's *Missa Pascale,* as therefore of little artistic merit, perhaps the work of a less competent figure:

---

[1] La Rue probably wrote two Mass settings based on this melody. There is some doubt concerning the authenticity of the second of these, however.

Example a(i)

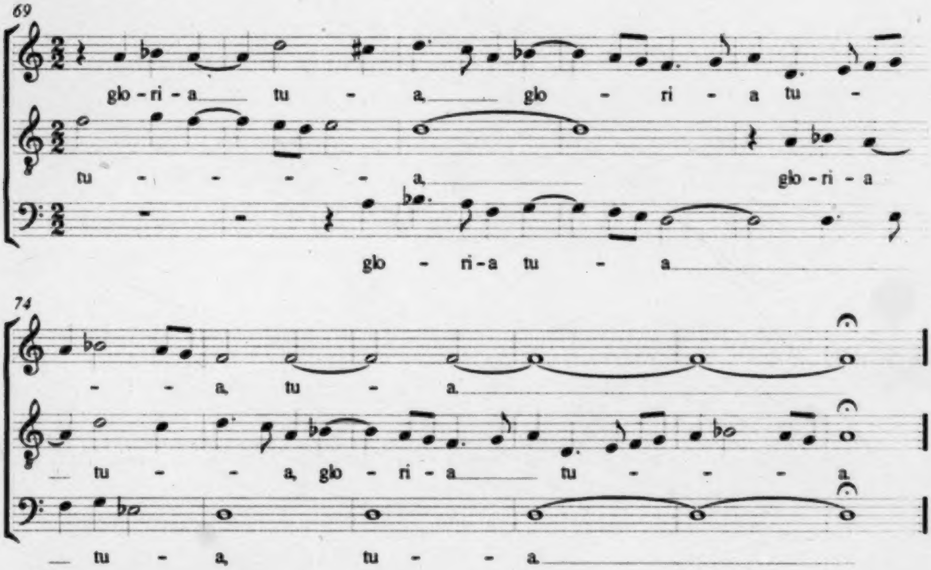


Listening to this passage as it stands, it would be difficult to counter the view that there is something fundamentally wrong with this music: the awkward and unusual linear writing; harmony in which tritone relationships are consistently and jarringly brought to bear. How can this be the work of one of the most famous musicians of his day, especially considering the finely tuned aesthetic principles known to have governed virtually every aspect of Renaissance artistic endeavour? It is not as if passages such as this are isolated examples either; there are literally thousands of passages like this in the music of just this composer, as well as in the works of many others from the period between 1400 and 1550. Are we missing something about this music?

Passages such as the above represent some of the most powerful evidence behind the contention that composers of this period expected certain conventions of chromatic alteration to be applied to their music at the performance stage.[2] Furthermore, evidence suggests that these practices were so widespread and fully integrated into the musical psyche of the Renaissance musician that in general it was not necessary to specifically notate them in the music.

Those who still doubt the validity of this claim need only compare the previous example with the following, in the light of even the most cursory study of Medieval and Renaissance music treatises, to surely come to the conclusion that this music assumed some form of chromatic alteration in performance.[3]

Example a(ii)


69
glo - ri - a tu - a, glo - ri - a tu -
tu - - - - - a, glo - ri - a
glo - ri - a tu - a
74
- - a, tu - a.
tu - - a, glo - ri - a tu - - - - a.
tu - a, tu - - a.

---

[2] Considering the position and function of the composer in this period, in practice most music of this period would surely generally have been prepared, at least for its first performance, under the direct supervision of the composer himself.

[3] Also contrary to still widely held opinion, most of what I have done in this case is *not* the application of *musica ficta,* but *recta* alteration (this will be explained in detail later on). The alterations I have made here are fairly straightforward. One other possibility exists in measure 74: C# in the *tenor* and E natural in the *bassus*. This creates a tritone relation with the *discantus,* but as it is passing, I believe it may still well have been tolerated. This reading is more consistent with what has already occurred in m. 70, and also manages to retain same solmisation for the canonic parts.

As a result of a failure to approach this music in a manner that takes into account the fundamental link between the way in which this repertoire was conceived and finally realised in performance, many modern editors and/or conductors seem loathe to intervene with the application of editorial accidentals which reflect this performance practice. Often the explanation put forward for this policy of non-intervention in the music before *c.*1520 is justified out of some misguided sense that this will alter the modal identity of the piece.[4] Whether or not this is really the case is an issue which will not be addressed in detail here, but in any case, as Zager has noted, such editorial conservatism

> produces distorted musical results since it fails to consider that the Renaissance singer would have approached this music from the practical standpoint of solmization rather than the essentially theoretical standpoint of modal purity, a concept which itself must be questioned as an operative compositional precondition for fifteenth- and sixteenth-century music.[5]

The manner and extent to which chromatic alteration applied to the music of the period in which I am interested – roughly a quarter of a century either side of 1500 - is therefore an issue which is of enormous importance for those interested in this body of music; it is also an issue about which there is still great contention. In the second half of the twentieth century a great deal has been written which advances our understanding of the so-called 'problem of *musica ficta*', the most important contributions to which have been detailed in Berger's essential study of the issue.[6] While no one commentator has managed to totally convince the musicological community of one consistently applicable view of this issue, I have found particularly interesting the work of those writers who have attempted to approach this subject from the twin points of view of solmisation and aural perception, while still attempting to place it within the context of the Renaissance theoretical writings.[7] It is this broad approach which I will be adopting during the course of this thesis.

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[4] On this topic, see Cristle Collins Judd, "Wibberly", Music Theory Online 2.5, Tuesday, 23 July, 1996. The two MTO articles which are pertinent here are Margaret Bent, "Diatonic *ficta* revisited: Josquin's *Ave Maria* in context." Music Theory Online, Volume 2.6, 1996; and Roger Wibberley, "Josquin's *Ave Maria:* Musica Ficta versus Mode," Music Theory Online 2.5, 1996.

[5] Daniel Zager, "From the Singer's Point of View: A Case Study in Hexachordal Solmization as a guide to *Musica Recta* and *Musica Ficta* in Fifteenth Century Vocal Music." Current Musicology 43 (1987), 11.

[6] Karol Berger, Musica ficta: Theories of Accidental Inflections in Vocal Polyphony from Marchetto da Padova to Gioseffo Zarlino (Cambridge: Cambridge University Press, 1987), xii.

It will ultimately be the purpose of this thesis, therefore, in presenting a new edition for *performance* of Pierre de la Rue's *Missa l'homme armé I,* to argue a reasoned response to the questions raised by the issue of chromatic alteration, a response which is as consistent as possible with what we know of the various conventions which governed the performance of this music. My approach necessarily not only involves considerable reliance on contemporary theoretical treatises, but also draws on an aurally inspired decision-making process suggested by the practicalities of the performance situation.

That aurally triggered 'decisions'[8] were a fundamental part of the Renaissance singer's method is a factor that I believe is very important, but one which has hitherto received relatively scant attention. If *modern* singers are subject to a similar process of 'conditioning', they too begin to 'hear' this music differently compared to the interpretation represented by the actual pitches on the page. In my experience as both singer and conductor – reflecting, therefore, my own personal experience as well as those of other singers - once particular procedures become aurally ingrained,[9] it is subsequently very difficult *not* to inflect certain passages in accordance with these learnt conventions.[10] That these experiences are at least in some way a mirror of Renaissance practice is supported by observations such as the following, from Vanneo in 1533:

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[7] As well as Karol Berger, particularly Margaret Bent and Gaston Allaire.

[8] These 'decisions' are of two varieties: largely subconscious and resulting from years of training; and more carefully considered.

[9] That the conventions are learnt is undeniable. I am not suggesting that singers will naturally, as a matter of course, make all such alterations; what I am suggesting is that singers will, given exposure to a consistently applied method of chromatic alteration, gradually begin to apply these principles independently. I have observed this as both singer, and, more recently, as director of *Ensemble de la Rue,* an *a cappella* ensemble specialising in this music, which I formed in 1996. None of the singers in this group are particularly familiar with the theoretical and aesthetic principles underlying my approach to the issue of chromatic alteration in my editions of the music with which we work. Despite the peripheral knowledge inevitably communicated as part of the rehearsal process, it has also not been my purpose to 'enlighten' them concerning the theoretical basis for my decisions. It is remarkable, therefore, how consistently singers pick up, for example, the accidental omission the type of alteration which has consistently been applied in other similar situations. This often takes the form of recognising an uninflected leading-tone progression – perhaps a fairly obvious case, but it also often concerns hexachordal choices, which are very much less obvious to modern singers. That the singers are responding to the actual *sound* of the music as well as how their individual lines are constructed in line

> The ears are considered the best interpreters, which can help you most, if you observe the parts of an accomplished singer, who when he feels that he is producing a dissonant progression, at once little by little and so discretely, that it can scarce be recognised and detected, either flattens or sharpens it, until a consonant and sweet progression strikes the ears.[11]

During the course of this thesis, therefore, aurally inspired considerations are an important factor in the decision-making process; an approach which will be seen to be remarkably in tune with the more theoretical one.

Reviewing the theoretical commentary of any era should be approached with care, as, with a few exceptions, its authors are by nature conservative. Of the theoretical discourse of the period in question, Brothers has observed: "It should come as no surprise that music theory is 'regular' and conventional while compositional practice is 'irregular' and unconventional."[12] Still, this body of work, alongside the manuscripts themselves, is all we have to go on in this area, and there is remarkable consistency within the mainstream of these treatises. As Berger has observed,

> Presently known texts are sufficiently rich and consistent to give us reasonable assurance that we may correctly distinguish the set of ideas commonly shared by

---

with the peculiarities of the hexachordal system, is undoubted. I believe the process of 'aural conditioning' reflected here is very much analogous to the situation of the Renaissance singer. Just how much more powerful the conditioning must have been for these singers, whose aural experience was unsullied by any other outside 'contamination', can scarcely be imagined. We underestimate this aspect of how this repertoire was conceived at our peril.

[10] A recent experience confirms this in no uncertain terms. A number of the singers in *Ensemble de la Rue*, as well as myself, also sing in another, professional, choir. A visiting conductor chose a particular work from this period in his program, and as he liked the way it sounded in the version he was used to using - which contained little or no chromatic alteration – he was loathe to change it. The unanimity of opinion amongst members of *Ensemble de la Rue* on how actually *difficult* it was in some cases to sing the written pitches was quite remarkable.

[11] Stephano Vanneo, Recanetum de musica aurea (Rome, 1533), quoted in James R. Bryant, "Musica Ficta in Renaissance Choral Music." The Choral Journal, October 1978, 21.

[12] Thomas Brothers, Chromatic beauty in the late medieval chanson. (Cambridge: Cambridge University Press, 1997), 30.

> musicians from idiosyncratic reform proposals by individual theorists, and that we may describe the historical evolution of this common core of ideas and practices within the studied period [for Berger *ca.*1300 – *ca.*1560]. . . . some of these ideas and practices remain constant throughout this period, while others evolved. It will also be seen that theoretical evidence alone shows no unmistakable geographical variants in the practice of implied accidentals.[13]

No doubt some of the consistency with which these theoretical treatises communicate – something intrinsically linked to what Brothers is describing – derives from the fact that their authors tended to rely very much on each other as authorities in the historical continuum of music theory. These treatises are full of specific acknowledgements[14] directed toward other theorists - from Boethius onwards - which perhaps more than anything else explains many of the similarities of expression observable across a variety of treatises separated by considerable time.

Another aspect of the theoretical discussion which is important to bear in mind concerns the degree to which practices described are applicable to the music of the previous one, two or even three generations of composers. How relevant, for example, are the writings of Gioseffo Zarlino, dating from 1558, to the music of Pierre de la Rue, who died in 1518? Zarlino certainly thought they were, as of the works he himself cites as exemplars – by Brumel (*c.*1460–*c.*1520), Gombert (*c.*1500–1556), Josquin (*c.*1440–1521), Morales (*c.*1500–1553), Ockeghem (*c.*1425–1497), la Rue (*c.*1460–1518), de Rore (1516–1565), de Wert (1535–1596) and Willaert (*c.*1480/90–1562) – roughly half are from the Josquin generation, who himself receives far more coverage than all but Zarlino's direct mentor, Adrian Willaert.

It seems reasonable to assume, therefore, – as will be the case in this thesis – that theoretical commentary up until roughly the second half of the 16th century is still applicable to the music of the generation of Josquin and la Rue; an assumption generally reflected and assumed by modern commentary on this issue.[15]

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[13] Berger, Musica Ficta, xiv.

[14] As well as many not-so-specific acknowledgements.

That theory alone cannot adequately describe practice is not surprising, however. By its very nature theory is retroactive, while composition is, at least potentially, proactive. It is perhaps sufficient at this stage, therefore, to say that some of the theoretical pronouncements are less than consistently adhered to in any of the real music of this period. This makes it all the more crucial that the modern editor displays fine judgement informed, but not enslaved, by knowledge of contemporary conventions.

For the purposes of this thesis, I am generally unconcerned with the techniques and conventions of paleography which are essential in bringing the source material within current commonly accepted notational standards. Instead, my point of departure is the situation in which a conductor finds him or herself in when coming to prepare music of the period in question for performance. In order to focus this study I have chosen one work, the *Missa l'homme armé I* of Pierre de la Rue, probably composed around 1500, right in the center of the period in question.

What then should be our approach to problems associated with chromatic alteration in a work such as this? As discussed above, the linear nature of this style of independent polyphony cannot be overstated, and with this in mind Zager's advice - arising from his warning cited earlier - seems well founded:

> The editor who determines editorial accidentals first on a horizontal basis in each voice, afterwards mediating these results on the basis of vertical considerations of counterpoint, reflects more closely the rehearsal circumstances of Renaissance vocal music than does the editor who proceeds through the newly transcribed score looking for necessary vertical adjustments to the theorist's contrapuntal rules. Even with this combined linear and contrapuntal approach, our editorial results cannot be considered

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[15] The general historical parameters of both Berger and Toft's books, as well as most other authors interested in this issue, also seem to taper off at this time. As Berger has observed: "by that time [*c.* 1560] the growing interest of composers in genuine chromaticism made exact notation of accidental inflections increasingly desirable and thus began slowly to undermine the practice of implied accidentals." Berger, Musica Ficta, xiii.

> definitive, for it is impossible to know precisely the decisions that the Renaissance singers would have made with regard to solmization and mutation.[16]

These comments are very much in accord with the approach to the music which will be featured in the present thesis, which to a large extent is based on the following principles:

1. Practices regulating the performance of individual lines are of primary importance.
2. Harmonic relationships, while important, should often not be considered paramount.
3. The music of this period was carefully rehearsed.
4. There exists a huge corpus of theoretical commentary on how this music is organised, not all of which is easily applied in all cases.
5. In all likelihood there is more than one version of individual *passages* - let alone a whole composition - which can be considered 'authentic.'

Although not entirely prescriptive, the above represents what I see to be a reasonably reliable set of premises on which decisions regarding chromatic alteration can consistently be based. They therefore reflect the roughly hierarchical methodology I have adopted when confronting such issues in the preparation of this edition of the *Missa l'homme armé I.* Most importantly this edition has arisen from a combination of scholarship and practicality, with any and all decisions subject to the acid test of aural scrutiny in a performing situation. Indeed, in the period encompassing the time when I first 'completed' the edition, to the time of presenting this thesis, I have conducted the work six times in concert.

The thesis will be presented in three parts. Part A is divided into chapters which highlight issues concerning the theoretical background supporting decisions made in the preparation of my edition of the Mass; while the chapters in Part B are devoted to a discussion of my specific application of these practices in this work.

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[16] Zager, 10.

As this second part addresses itself to details in the edition of the *Missa L'homme armé I* to follow, and as this edition is a transposed one - to accommodate the range of a modern mixed voice chamber choir; part B references a similarly transposed conceptualisation of the hexachord system described in part A. The transposition I have settled on places the music a minor 6th higher than written, transposing the basic mode from D dorian to B♭ transposed dorian. This transposition clearly demands a similar transposition of hexachordal relationships, which in effect amounts to cycling the hexachordal order down a fifth four times.[17] Thus the original signature of no flats becomes a signature of four flats, and the hexachordal arrangement now sees the hard hexachord based on E♭, the natural hexachord on A♭, and the soft hexachord on D♭. This last therefore renders G♭ as a *recta* alternative to G♮. *Ficta* notes theoretically available are D♮, A♮, and A♮; C♭ and F♭.[18] The edition itself makes up Part C.

This format has been decided upon because decisions pertaining to any particular chromatic alteration almost inevitably rely on the balancing of a number of different supporting or conflicting indicators. Any meaningful discussion of a whole work is therefore made extremely difficult when considering just one of these indicators at a time. After an overview of the theoretical groundwork has been presented in Part A, the detailed discussion of the Mass in Part B will hopefully therefore be able to more clearly and convincingly justify the resulting edition.

In order to avoid duplication, I will endeavor to draw examples within Part A from works *other* than the *Missa l'homme armé I;* in general, however, these will be taken from other compositions by la Rue,[19] as stylistic consistency is an important aspect of the application of at least some of these principles.

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[17] And then adjusted for octave displacement.

[18] Which correspond, respectively, to: F#, C#, G#, E♭ and A♭. These issues will be discussed in detail in chapter 2.

In the examples in Part A, I will retain the usual practice of notating chromatic alterations above the notes,[20] however in the edition of the *Missa l'homme armé I* to follow, as well as most of the discussion in Part B, accidentals are marked directly in front of the notes to which they apply, as this edition seeks to present the work as a specific interpretation.

In the actual edition of the Mass presented as Part C, a number of practical issues need to be considered. These are addressed by way of a brief introduction immediately preceding the edition.

Whenever referring to voice parts at their original pitch, I will use Renaissance terminology; despite the fact that voice assignments are often extremely inconsistent even within an individual source for any one work. For the Mass, this means the four voices will be referred to as *discantus, contratenor, tenor* and *bassus*. In music of more than four parts, it is usually either the *tenor* or the *bassus* which is doubled (or both). In the edition, as well as the transposed examples in Part B, I will refer to the parts in modern terms: soprano, alto, tenor and bass.

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[19] Generally Mass settings.

[20] In the couple of cases where more than one satisfactory alternative presents itself I will use bracketed accidentals as well.

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CHAPTER 1

INTRODUCTION

In the chapters which follow, I shall attempt to provide a background and justification for the methodology I have adopted when considering possible chromatic alterations in the music of Pierre de la Rue. This is a methodology I have found to be consistently applicable to this repertoire; not only the *Missa L'homme armé I* - the primary focus of this thesis - but also the other Masses, motets and secular compositions of this remarkable composer. In this introduction I will attempt to focus the detailed discussions in Part A, to follow, by briefly summarising the most important aspects of this methodology. In its turn, Part A will then hopefully allow the alterations I have made in my edition of the Mass - alterations expounded in Part B - to be more fully understood within the context of Renaissance performance practice.

As suggested in the preface, my methodology takes as its point of departure the situation in which a conductor finds him or herself when preparing a score for performance. In scanning any modern score-transcription of music of this period, potential chromatic alteration can be suggested by any or all of the following:

1. Hexachordal usage adding one flat beyond the 'key signature'
2. Leading tone/suprasemitone figures
3. Vertical dissonance
4. Tierce de Picardie
5. Canon and Imitation

How can these issues practically effect how the music will ultimately sound when brought to performance? Within each of the areas described by the above headings, I will now briefly summarise the practices I find to be particularly applicable regarding chromatic alteration in la Rue's music:

1. Hexachordal usage adding one flat beyond the 'key signature'

Musicians of this period were highly suspicious of the tritone, either as a melodic entity or as a harmonic relationship. It is with the former that we are concerned at this stage. If we assume an unsignatured piece, the tell-tale sign of an area where use of the soft hexachord might be required to eliminate the tritone revolves around whether the passage involves both F and B.[1] In most practical situations the F will be below the B, and the closer their proximity, the more likely it will be that some form of alteration to correct the tritone relationship will be required. In the vast majority of cases this will necessitate mutation into the soft hexachord, therefore the lowering of B's to become B♭'s.[2]

2. Leading tone/suprasemitone figures

Almost all two-voice counterpoint within the polyphonic textures common in music of this period features frequent cadential structures defined by a point of common arrival at the unison or octave (occasionally double octave). In virtually every case, these octaves should be approached by an expanding major sixth or a contracting minor tenth, whereas unisons should be approached by a contracting minor third. In some cases there will be ornamental or auxiliary notes accompanying these progressions, and these should also be altered, if necessary, in keeping with the same guidelines. In general, leading tone progressions will be significantly more common than those of the suprasemitone variety.

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[1] In a piece with one flat, the corresponding pitches would be B♭ and E; with two flats, E♭ and A; etc.

[2] The most common exception being where a cadence in G is also involved, in which case the F may well require alteration to F#.

A corollary to this practice suggests that all octaves and unisons are candidates for similar treatment, even if their function is not cadential. I have found this to be widely applicable in this music.

Imitative textures built on a succession of motivic cells are a particular feature of la Rue's compositional style, and these cells are normally delineated by their assignment to short sections of text, which thus serve as the basic framework governing large-scale structure and continuity. Counterpoint within this structure is often coordinated by pairs of voices, and the identification of cadential coincidence within this contrapuntal texture is, in my view, the most important means by which this large-scale structure is given direction and cohesion. I believe this is only truly achievable by a consistently applied process whereby these cadential progressions emerge decisively from the texture by way of chromatic alteration; and in my view, this is the single most important context in which chromatic alteration is required. As will be seen as my investigation continues, the evidence in favour of the requirement for such alteration is exceptionally persuasive.

3. Vertical dissonance

All vertical perfect consonances – unisons, fourths, fifths and octaves (and their compounds) – should remain perfect, by alteration if necessary. This applies consistently to all functional tones[3] within any one part. Alteration should be made by a *recta* alternative where possible, otherwise by the use of *ficta*. Other factors are often relevant with regard to this category. There are important and specific exceptions to this largely aesthetic principal, governing strong cadential movement in particular.

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[3] Passing notes or fleetingly heard components of rapid melismatic passages, for example, would not generally be considered functional. Hexachord choice would still be particularly important here, however.

4. Tierce de Picardie

All final cadences including a third, as well as similarly voiced intermediate cadences accompanied by a fermata or followed by rests, should be considered likely candidates for the raising of the third to become major. This should be done in all cases unless the part-writing in some way precludes it.

5. Canon and Imitation

Where at all possible, true canons should be realised as intervallically identical where the interval of imitation is the unison, fourth, fifth or octave. The possibilities of same solmisation should be explored even in other cases, such as entries at successive intervals of a fifth (i.e. where the third voice, for example, is a major ninth removed from the original).

In other instances where imitation is concerned, a conscious decision should be made whether same solmisation is required. Factors which might contribute to the outcome of this decision include the interval of imitation, the period for which the imitation is maintained,[4] how many voices are involved, the nature of the material itself (how 'distinctive' it is), and other case-specific circumstances, such as, whether sequential construction is a factor.

Whilst necessarily a summary at this stage, I believe the application of the procedures described above represents a reliable method by which a conductor coming to this repertoire for the first time could reasonably come to terms with it without the exhaustive investigation of contemporary theoretical sources often assumed necessary when dealing with this music. If this were to enable such conductors to more seriously investigate this exceptional repertoire, my purposes would be well served.

This is music which I have found to be exceptionally attractive for both singers and audiences alike, and I believe the *Missa L'homme armé I,* in particular, to be a work of rare genius which deserves wider performance by contemporary chamber choirs. The edition presented as part of this thesis now makes this work available to such groups.

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[4] This is often comfortably determined visually, as the contour of imitative parts is easy to compare - often, for example, remaining the same for a certain period, then perhaps reverting to a freer construction.

PART A

THEORETICAL BACKGROUND

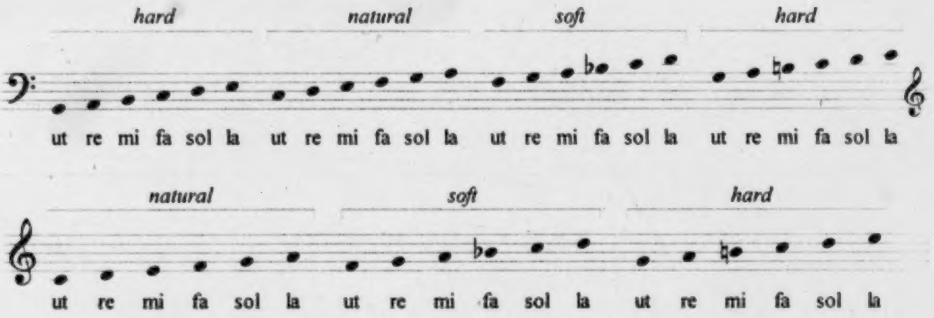
CHAPTER 2

Hexachordal solmisation, *musica recta* and *musica ficta*, Pierre de la Rue

Singers in the Medieval and Renaissance church received their early training using a system called *solmisation*, based on the teachings of Guido di Arezzo (*c*992 – *c*1050), whose placement of syllables representing pitch relationships 'in the hand' remained the underlying foundation of musical education well into the 16th century.

The process of *solmisation* involved giving fixed names to the six notes of a step-wise melodic sequence (a sequence which is intervallically pre-determined and corresponds to the first six notes of our major scale): *ut, re, mi, fa, sol, la;* and arranging the resulting *hexachords* in an overlapping sequence to cover all notes of the *gamut*, as follows:

Example 1: The hexachords of the gamut


hard
natural
soft
hard
ut re mi fa sol la ut re mi fa sol la ut re mi fa sol la ut re mi fa sol la
natural
soft
hard
ut re mi fa sol la ut re mi fa sol la ut re mi fa sol la

One of the results of this series of overlapping hexachords was that certain notes, depending on their position within the *gamut*, could have multiple 'names', determined by their simultaneous containment within distinct hexachordal arrays. For example, the A immediately above or below middle C could variously be *la* in the natural hexachord, *mi* in the soft hexachord, or *re* in the hard hexachord; thus A *la mi re.*[1] Individual pitches are routinely described in this way in Renaissance theoretical writings. The full range of notes of the *gamut* thus available to singers were known as *musica recta,* while all chromatic alterations occurring outside these notes was termed *musica ficta.*

Another facet of this arrangement - indeed perhaps its most important peculiarity - was the duality of the note B, which, in modern terms, existed as either B♮ (or *durum* = hard) in the hard hexachord, or B♭ (or *molle* = soft) in the soft hexachord. This is an essential idiosyncrasy of the hexachordal system, one which more than anything else defines the difference between this music and that in which a more contemporary concept of *tonality* operates.[2]

Singers would be required to read and realise their music in a manner consistent with the hexachordal system, which clearly presented a procedural difficulty if the range of any one melodic line extended beyond the limits of a particular hexachord. When this occurred, singers were expected to make a *mutation* from one hexachord to another, an operation which would be performed on a note common to both hexachords. The choice of the hexachord into which any individual part mutates would have been a matter of judgment and experience, and the probability that these selections would have been influenced, aurally at least, by those of the surrounding parts, seems quite high.[3]

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[1] Octave pitch is also routinely indicated, by use of small and large case, double letters, etc., however I will not be using this sort of terminology. In cases where it is important to determine the actual octave, I will make this quite clear by other means.

[2] If the hexachordal system was the pre-cursor of the tonic sol-fa system, the practicalities of the system suggest a more flexible approach to 'tonality' than is implied by the modern key system with which that term is associated, as the extra flat allows for what Allaire terms 'oscillation' between the molle and durum identities of the prevailing mode. See Gaston G. Allairé, The Theory of Hexachords, Solmization and the Modal System ([Rome]: American Institute of Musicology, 1972), 27. Thus, for example, the recta B♭ would have the potential to transform the dorian mode on D to effectively a transposed hypodorian. A related conceptual procedure meant that a key signature in music of this period had the effect of transposing the available gamut down a fifth for each successive flat. Thus, for example the signature of two flats transposed the gamut to start on double low F, with all B♭'s, E♭'s and A♭'s becoming recta.

Almost certainly, therefore, adult singers - the finest performers of their day - had been exposed to many years of what almost amounts to indoctrination in this system, and Coclico's pronouncements on the training of young singers in 1552 give us some idea of how rigorous this training really was:

> Whoever has found such a teacher [one who, in Coclico's words who "sings beautifully and smoothly by special natural instinct"] in his youth makes the kind of singer that one sees in the Belgians, men from Hainaut, and the French, who have a special gift in singing above those of the other nations. . . ; what is learned in youth never disappears in forgetfulness. . . . he should practice them [vocal exercises] every day until he is grounded in the method and use of this art, . . . [4]

That the process of training and developing singers was a long and involved one is further evidenced by the Italian theorist Nicolaus Burtius (1487), who quotes Guido himself as having stated "that the knowledge of singing could scarcely be acquired in ten years."[6] It is perhaps difficult, therefore, for modern scholars, and singers in particular, to comprehend the effect of such a single-minded training regimen, of which actual vocal production of the type referred to by Coclico was only one aspect. With all due deference to modern performance practice, there have probably never before or since been singers whose immersion in one style was so absolute. When coming to try to understand the music of this period, we should be wary of underestimating the capabilities of these singers.

That the hexachordal system formed the basis of this training cannot be doubted, as it colours every aspect of discourse on music theory in virtually all the treatises from the period.[6] It is interesting to imagine, therefore, how the regimen involved with the practice of solmisation affected singers in their day-to-day 'work' of reading and performing this music, especially given that almost invariably such singers read their own part as a separate entity.[7] Just as is the case with modern singers trained from a young age in *sol-fa* techniques, these singers would certainly have eventually dispensed with the use of solmisation syllables, as the process would have become so ingrained as to render this step superfluous,[8] as Allaire also has suggested:

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[3] Although there is disagreement amongst theorists, it is now generally assumed that mutation can occur between any of the three hexachords. This matter will receive more detailed treatment in Chapter 3.

[4] Adrian Petit Coclico, Musical Compendium (Compendium Musices), trans. Albert Seay (Colorado Springs: Colorado College Music Press, 1973), 20.

[5] Nicolaus Burtius, Musices Opusculum, trans. Clement A. Miller (Neuhaussen-Stuttgart: American Institute of Musicology, 1983), 46.

> Only beginners in the study of music solmised, and the singer-composers working at the French court and the Sixtine [sic] Chapel most probably sight-read their vocal parts even at the first rehearsal of a new piece of music; to say that the colleagues of Josquin, Claudin, and others harmonized by ear would be a highly surmised and unprovable assertion. But, like solfeggio to a modern singer, after sufficient training, solmisation became an automatic subconscious process to a Renaissance music performer; . . .[9]

What is interesting here is what Allaire really would *like* to say, but cannot quite bring himself to do: that singers of this period harmonised by ear. While he may well be prudent to withdraw from the brink of advocacy of this position, I believe the role played by aural perception in realising the less than fully prescriptive nature of how music of this period was notated is vastly underrated by contemporary scholars. Further, perhaps it would not be unreasonable to suggest that any modern scholar who comes to this music without extensive experience as a performer in this field, has little chance of truly understanding how it works melodically or harmonically.[10]

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[6] The pervasiveness of a hexachordally based way of thinking is reflected in a rather novel manner in la Rue's case, as he even used hexachordal symbols to replace the 'la' in the writing of his own name.

[7] Jessie Owens' recent book is instructive of this practice: Jessie Ann Owens, Composers at Work. (New York/Oxford: Oxford University Press), 1997.

[8] Franchino Gaffurio, Practica musicae (Madison: University of Wisconsin Press, 1969), 22. The theorists name is alternatively spelt 'Franchinus Gafurius.' I have adopted one spelling only to avoid confusion. Gaffurio proves that even at the time it was acknowledged that there were a number of ways in which to sing written notes: via their solmisation syllables, as vocalise, or with text.

[9] Gaston Allaire, "Debunking the Myth of Musica Ficta." Tidjschrift van de Vereniging voor Nederlandse Muziekgeschiedenis xlv–2 (1995), 111.

Another important aspect of the singer's training was the reliance placed on aural perception. I have already touched briefly on this aspect in the preface, but one particular practice is deserving of further comment here. This involved the importance of vocal improvisation as an actual tool used in the training of singers of the period in question.

In Johannes Tinctoris' *Liber de arte contrapuncti* (1477), constant mention is made of singing 'super librum', and indeed, if his heading for Chapter IX in the Third Book is any indication, this practice was just as important as composition itself for the true understanding of the art of counterpoint.[11] Further evidence which shows the practice to have been an essential part of the singer's trade is given by the following, from Coclico (1552):

> The first requirement of a good singer is that he should know how to sing counterpoint by improvisation. Without this he will be nothing.[12]

It seems reasonable to assume, therefore, that singers were used to relying on purely aural cues in performing counterpoint, and that it is very likely memory of how passages of certain types were often realised played a much greater role in the performance of this music than we have perhaps assumed. While it is not within the parameters of this thesis to pursue the fascinating ramifications of this for our understanding of this music, I believe it can be safely assumed that if *we* can hear and respond to practices considered desirable regarding how parts relate to each other, *they* certainly could.[13]

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[10] Of course there is good and bad experience to be had here. An atmosphere of inquiry and experimentation is essential, I believe.

[11] Johannes Tinctoris, The Art of Counterpoint. Musicological Studies & Documents 5 trans. and ed. Albert Seay (Rome: American Institute of Musicology, 1961), 140. The chapter heading reads: "Conclusion of the work in which constant effort, both in composing and singing *super librum*, is highly commended for the obtaining of art in both."

[12] Coclico, 24.

[13] As both conductor and singer I have now become so accustomed to hearing this music realised in the manner consistent with the principles outlined in this thesis that I constantly hear what sound to me as 'mistakes' in performances by other ensembles. Experience has lead me to believe that even seemingly obscure alterations can be predictable during the course of a first reading of much of this music.

Given this background, and the knowledge that this music was carefully *rehearsed,*[14] it seems inconceivable that discussions were not held on the 'correct' way in which individual passages should be 'said.' All of the training and knowledge singers gained from practicing their art under the expert tutelage of - for the most part - professional composers, should not leave us surprised that certain chromatic alterations were insisted upon, despite their often not being 'signed' by these same composers. This did not mean, however, that such alterations were not required, and that chromatic alteration was not a fairly commonly accepted procedure; otherwise, why would intabulations of the period, for example, so consistently go beyond the bounds which seem to have been often assumed by subsequent editorial practice?[15]

Composers of this music were invariably either choir masters or responsible for the first performances of their music in some way, and before score-based notational systems, performance itself – possibly more than with any other subsequent music – was an essential part of the process of the composition of this complex polyphonic music:

> It is important to remember how much composers and performers relied on performance for their work with music notated in separate parts. . . . There is other evidence that suggests that once music was notated in separate parts even the composer could not readily imagine what it sounded like by just looking at it; he needed to hear it performed.[16]

I feel it is reasonable to assume, therefore, that individual composers may have developed their own particular idiosyncrasies regarding conventions of performance practice. Policies concerning such matters as text underlay, chromatic alteration, tempo, dynamics, vocal tone, etc., almost certainly would have varied from place to place. In such an environment our concept of a definitive 'autograph' version of any work of this period - a concept only recently brought about in conjunction with the process of the 'canonisation' of individual works of art in some continuum of creative endeavor – is irrelevant.

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[14] Owens' discussion of how music was read (Owens, 35-63) gives a great deal of implicit credibility to this assertion.

[15] See also Robert Toft, Aural Images of Lost Traditions: Sharps and Flats in the Sixteenth Century. (Toronto: University of Toronto Press, 1992), 4, 131-3.

[16] Owens, 55.

A number of composers of this period were also well known for their theoretical writings, and certainly the converse seems to have been very often the case: theorists regularly also wrote music.[17] Singers, on the other hand, were not all specifically trained in the theoretical issues which dominate the treatises of the day; however, under the guidance – in most cases – of composers (the true musicians[18]), their practical experience taught them "to make music by applying their knowledge of contrapuntal simultaneities, acceptable sounds, to the incompletely prescriptive notation."[19] Reading in part books "they relied . . . on group analysis of the intervals, the range of the vocal parts, the cadential notes, and the [their own] individual analysis"[20] to make decisions about the music they sang.

During this period, as in any such discipline at any time, the quality of singers varied, probably quite widely. That the finest singers were also educated musicians is surely not in doubt. Gaffurio (1496) describes such a person as one who is "lacking in neither theory nor practice;" only then being allowed to be called "a true musician."[21] This true musician was also one in whom "nature" and the "benefits of instruction" were equally important, as "the perfect musician will not succeed without both."[22] As if admitting that not all are created equal, however, the theorist declares "it is of very great importance whether the singer, whoever he be, be a musician or not",[23] as clearly not all singers managed to fall into this category: "the musician is to the singer as the leader is to the herald"[24]

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[17] The fact that none of the greatest compositional figures (with the possible exception of Phillip de Vitry) were also well known as theorists, and that none of the theorists were particularly great composers probably reflects strongly issues related to those implied by Brothers, above (see preface).

[18] Franchino Gaffurio, The Theory of Music, trans. Walter Kreyszig (New Haven: Yale University Press, 1993). Guido himself is quoted here referring to the difference between the singer and the musician: "Great is the difference between musicians and singers; the latter [merely] sing, the former know what music is made of." (Gaffurio, Theory, 43). This general distinction between a performer – no matter how skilled – and the composer, or one who understands and appreciated the science of music, is consistently drawn in theoretical writings right through this period.

[19] Margaret Bent, "Diatonic Ficta." In Early Music History 4: Studies in Medieval and Early Modern Music, ed. Iain Fenlon (Cambridge: Cambridge University Press, 1984), 13.

[20] Allaire, Theory of Hexachords, 113

[21] Gaffurio, Theory, 42

[22] Ibid., 43.

That la Rue was, in these terms, a 'true musician' can hardly be doubted, and to place la Rue and his work within the context of the musical environment that has just been described, a brief overview of his life and career is necessary, as well as some discussion of a particular feature of his music which, in the light of what has preceded, will have an important bearing on the discussions to follow.

Many details of la Rue's life still remain sketchy; however, it is thought he was born, the son of Jean, a court trumpeter, probably in the Burgundian town of Tournai (about 50 kilometers from Cambrai, the birth-place of another famous Netherlander, Guillaume Dufay), in around 1460. Although he may have been a singer in the Hapsburg-Burgundian court chapel between 1477 and 1485 (or even at the Duomo in Sienna[25]), the first solid documentation of his presence places him as a tenor in the chapel choir at 's-Hertogenbosch around 1490.

La Rue moved from there to the court chapel in January 1493; from that time until 1516, when he retired, he was in unbroken service to the Hapsburg-Burgundian monarchs in Brussels and Mechelen: respectively Emperor Maximilian I, Phillipe le Beau (Phillipe the Fair), Queen Juana of Spain, Marguerite of Austria, and the Archduke Karl, later to become Charles V of Spain.

During his lifetime la Rue accompanied the court entourage on many journeys, including to Spain in 1501-2 and again in 1506. Despite some evidence to the contrary,[26] there is no certain record of la Rue ever going to Italy, although one other scholar[27] contends he may in fact have been in Florence in 1492 at the time of the death Lorenzo the Magnificent - speculation yet to be confirmed. On his retirement in 1516, la Rue took up residence at the Chapter of Notre-Dame in Courtrai, where he died on November 20, 1518.

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[23] Ibid., 44

[24] Ibid., 42.

[25] Martin Staehelin. "Pierre de la Rue in Italien." Archiv für Musikwissenschaft 27 (1970): 128 ff.

[26] See both the previous and the following footnotes.

[27] Albert Dunning, Die Staatsmotette, 1480 - 1555 (Utrecht: Oosthoek, 1970), 23 - 25.

Pierre de la Rue's contemporaries placed him in the first rank of composers, possibly only eclipsed by Josquin, and his music, which continued to be printed for many years after his death, survives in more than 150 sources, more than twice as many as his revered contemporary.[28]

Even within his lifetime, la Rue's fame rested mainly with his Mass settings, of which 31 securely authenticated works survive. The fact that the 1503 Petrucci publication, *Misse Petri de la Rue,* ran to no fewer than six editions attests to the probability that la Rue's music was well known and highly regarded in Italy as well as in his more northerly neighbourhood. Like all significant composers of this period, La Rue also wrote many motets, but perhaps partly because these were overshadowed by his Masses, only 24 'authentic'[29] motets have survived. La Rue also wrote a great deal of secular music, of which the more than 30 surviving chansons are the most important.[30]

La Rue and the gamut

One of the distinctive features of la Rue's output is his well documented use of low registers in a number of important works.[31] While it is not the purpose of the present thesis to examine this specific issue in any detail, one conclusion which seems inescapable here concerns the ramifications this low pitch setting holds for hexachordal choices, and la Rue's concept of the gamut.[32]

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[28] See Nigel Davison, Herman Keahey, and Evan Kreider. Pierre de la Rue: Opera Omnia. Corpus Mensurabilis Musicae 97, 1 – 6. The Masses. (Stuttgart: American Institute of Musicology/Hänssler-Verlag, 1989 – 1996), XIII.

[29] Davison, Keahey and Kreider, Opera Omnia, vol. 9. This volume of the complete edition contains all the motets, and is edited by the leading scholar in the area of la Rue's motets, Nigel Davison.

[30] We still await modern editions of much of the secular music.

[31] A number of Netherlands composers of this period, including la Rue, Busnois and Ockeghem, seemed to explore very low ranges. See Nigel Davison Missa L'Homme armé. (Wolfenbuttel : Moseler Verlag, 1972), preface. Arthur Mendel, "Pitch in Western Music since 1500 – a Re-examination." Acta Musicologica 1 (1978), 48, 69-70. Jaap van Benthem, "Lazarus versus Absalon. About Fiction and Fact in the Netherlands Motet." Tidjschrift van de Vereniging voor Nederlandse Muziekgeschiedenis xxxix (1989): 54-82. Joshua Rifkin, "Problems of Authorship in Josquin; Some Impolite Observations." Proceedings of the International Josquin Symposium at Utrecht, 1984. Honey Meconi, "Another look at Absalon." Tidjschrift van de Vereniging voor Nederlandse Muziekgeschiedenis xlviii/1 (1998): 3-29.

It is widely accepted that the *gamut* of notes available to a composer in this music ranged from Γ *ut* – the G an eleventh below middle C - to ee *la* a tenth above.[33] It is important to note at this stage that the B♭ a ninth below middle C would therefore be considered *ficta,* as the duality of the hard and soft B only commenced in the *next* octave, with the first overlapping of the hard and soft hexachords.[34]

A number of treatises from this period place the hexachord order somewhat differently, however, with the soft hexachord in particular being positioned below the hard, thus allowing F *ut* below Γ.[35] At least two treatises even seem to place the natural hexachord at the bottom, thereby allowing for *4 extra notes* below Γ. In describing the natural compass of the voice, Coclico (1552) states that this "has a limit in ascending and descending, but a scale does not, since it always returns to F fa ut."[36] Over a century earlier, Ugolino's description (1430) is similar:

> The first hand begins on the F immediately below gamma, . . . Another hand of recta and ficta music, beginning on a C a fifth lower than gamma, differs from the first by little except its low pitch. . . . We see that below gamma many notes may be imagined and understood, . . . therefore it is permitted that the syllables be determined from C.[37]

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[32] Surprisingly this has not been discussed in any of the forums listed above.

[33] At the lower end of the range this is very important as it thereby renders B♭ as *ficta,* due to the fact that, with the hard hexachord the lowest, it has only one 'name'. The extension of the gamut even one further tone down allows B♭ to be included as a *recta* choice at this pitch range. F# is then also allowed as a *ficta* subsemitone below Γ.

[34] The actual range of the gamut is a matter of some contention, and as time passed the gamut reflected here was gradually expanded. This will be discussed in greater detail later, especially in its application to the music of Pierre de la Rue.

[35] See also the table drawn from Guilliard in Allaire, Theory of Hexachords, 44.

[36] Coclico, 9. If F below Γ is considered as *fa,* clearly the natural hexachord on double low C – four notes below Γ - is being imagined. See also the translator's comments on page 29.

[37] Ugolino of Orvieto, "Declaratio Musice Discipline" trans. Albert Seay, reprinted in Andrew Hughes, Manuscript Accidentals: Ficta in Focus 1350-1450. Musicological Studies & Documents 27 (Florence: American Institute of Musicology, 1972), 32.

Similarly, the Spaniard Bartolemeo Ramis de Pareia is instructive in his 1482 treatise, also placing a hexachord based on F below Γ,[38] but more particularly, speaking of the range extending even further (perhaps referring to practices north of the Italy):

> Italians should not wonder . . . , when we arrange an octave below *c*, since it is well-known not to be new, but to be used very frequently, and almost all many-stringed instruments of modern musicians have it. In fact it has been found through instruments that ancient monochords began on the same low *c*.[39]

Even this, while it covers the range of the *Missa l'homme armé*, would not accommodate all of la Rue's low music, which descends to a printed BB♭ a sixth below Γ, implying that, at least in the imagination, the soft hexachord based on FF an octave and a whole step below Γ was the theoretical base of the usable gamut for this composer.

It is not, therefore, a huge leap of faith to accept that composers such as la Rue would, and indeed did, extend the available gamut in either direction to suit their own purposes, and that this extension merely meant a continuation of hexachord order - either up or down – as far as required.

The practical ramifications of this for this setting of the *Missa l'homme armé I* only affect the low end of the range. As low D *re* (an octave and a minor seventh below middle C) is the lowest written pitch in the piece, the B♭ above that now becomes available as *recta* - or *fa* within the soft hexachord.

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[38] Karol Berger, "The common and the unusual steps of musica ficta: A background for the gamut of Orlando di Lasso's Prophetiae sibyllarum." Belgisch tijdschrift voor muziekwetenschap / Revue belge de musicologie, Belgium xxxix-xl (1985-86), 65. This concept of three hands seems to have gained quite wide currency, as Berger cites a number of different theorists - Ramis (1482), Bonaventura of Brescia (1489) and Franciscus di Brugis (1503-4) - all of whose concepts really amount to the same thing; that the hexachords of the hand existed in the 'perfect' position, but also transposed by a whole tone up (hard) or down (soft), resulting in the hexachords already cited above.

[39] Bartolemeo Ramis de Pareia, Musica Practica. Musicological Studies & Documents 44, trans. Clement A. Miller (Neuhausen-Stuttgart: American Institute of Musicology Hänssler-Verlag, 1996), 96.

Musica ficta

I have already alluded to the concept of *musica ficta* on a number of occasions, especially noting its widespread misinterpretation in the minds of many modern performers.

What then *is* "musica ficta"? That the concept was not new to composers in the 15th century is quite clear. In his *Lucidarium* of 1318 Marchetto of Padua refers to it as *falsa musica,* and associates it with non-diatonic permutation - that is chromatic alteration.[40] Not long afterwards the composer Phillipe de Vitry referred to it as "when we make a whole tone out of a semitone, or the reverse;"[41] while later treatises refer to it virtually as a commonplace,[42] with *musica ficta* often invoking the use of notes outside the normal gamut of *musica recta* to 'correct' intolerable intervals:

> The purpose of perfection is that all consonances and dissonances ought to be perfect. However, imperfect consonances or dissonances are distant from the perfect by a greater semitone. Therefore where consonances or dissonances occur in *musica recta* the imperfect ones are perfected through *musica ficta* by the intervening greater semitone.[43]

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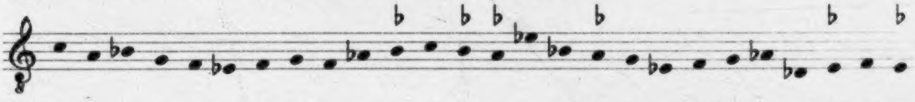
[39] Bartolemeo Ramis de Pareia, Musica Practica. Musicological Studies & Documents 44, trans. Clement A. Miller (Neuhausen-Stuttgart: American Institute of Musicology Hänssler-Verlag, 1996), 96.

[40] Marchetto da Padova, The Lucidarium of Marchetto of Padua, trans. and ed. (with commentary) Jan W. Herlinger (Chicago/London: University of Chicago Press, 1985). See Treatise 8, Chapter 1, 271-281.

[41] Karol Berger, Musica ficta, 12.

[42] Gioseffo Zarlino, The Art of Counterpoint, (Part 3 of Le institutioni harmoniche, 1558), trans. Guy A. Marco (New Haven: Yale University Press, 1968), 279. In referring to transposition of a mode, Zarlino states that "the composition is then said to be sung in *musica ficta.* The first way to do this – *ignoring the little used methods* [italics mine] " – implying a variety of methods by which *ficta* is invoked. Johannes Cochlaeus, Tetrachordum Musices. Musicological Studies & Documents 23, trans. Clement A. Miller (Rome: American Institute of Musicology, 1970), 46. Cochlaeus' 1511 treatise devotes just one page to "Musica ficta or false tones", yet the implications derived from his choice of language suggest the concept to have been a familiar occurrence. His comments on transposition here are similar to Zarlino's: "Thus the song transposed a fifth produces *musica ficta.* " Nicolaus Listenius, Musica, trans. Albert Seay (Colorado Springs: Collorado Collge Music Press, 1975), 14. Listenius' comments about 'fictive song' also support this contention: "While everyone speaks of it with many evasions, in itself it is not a difficult thing . . . . Obvious examples are everywhere, wherefore I give only this example in one voice for its method and substitution."



[43] Ugolino, quoted in "Ugolino: the monochord and musica ficta." Musica disciplina, xxiii (1969) 30.

In none of these later treatises does the concept differ significantly from de Vitry's succinctly worded statement, the only variance being that it is most often described in terms of the practice of solmisation. As has already been mentioned, in the normal course of events the singer was expected to remain within the confines of *musica recta* unless one of the various common practical conventions were to demand an otherwise unexpected mutation from one hexachord to an 'imaginary' one, as *musica ficta* really refers to the placement of the semitone where it would not normally belong, as Cochlaeus (1511) describes:

> *Musica ficta* is found most particularly between *mi* and *fa,* for if *mi* is sung in place of *fa* a whole tone is formed from a semitone, and if *fa* is sung in place of *mi,* a semitone is formed from a whole tone.[44]

This substitution of the tone for the semitone, and vice versa, was termed a *conjunta,* which in effect meant "nothing but our flats and sharps,"[45] a concept confirmed by Ramis (1482):

> it should occur at least in two ways, for making *fa* from *mi* is different than making *mi* from *fa,* . . . Therefore, when *fa* is to be made from *mi,* they write with such a sign, namely the round ♭, but when *mi* is made from *fa* they write the sign, namely, square ♮ or else #.

Thus the expanded hexachordal system arose from the proximity of *mi* and *fa,* and the desire to be able to say *mi* whenever there is *fa,* and vice versa. In effect this meant that for all places where *fa* would be sounded - that is C in the hard hexachord, F in the natural, and B♭ in the soft – these positions should also be able to be sounded as *mi:* respectively, C# (in a *ficta* hexachord based on A), F# (in a *ficta* hexachord based on D), and B♮ (in the *recta* hard hexachord). Similarly, wherever there is a *mi* – on B, E and A - these positions are also able to be said as *fa:* B♭ (in the *recta* soft hexachord), E♭ (in a *ficta* hexachord based on B♭), and A♭ (in a *ficta* hexachord based on E♭), respectively.

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[44] Cochlaeus, 46.

[45] Allaire, Theory of Hexachords, 33. Marchetto would have called this a 'permutation', see Marchetto, 271-281.

Importantly, Ramis (1482) goes on to explain that a *conjuncta* not only could occur in step-wise progressions perhaps implied by this concept, but also with other intervals:

> And they [many 'other' theorists, Philipetus is mentioned] define a conjunction this way: a conjunction is making a whole tone from a semitone and a semitone from a whole tone, also a ditone from a semiditone and a semiditone from a ditone, and likewise with the other species. Here they speak correctly, . . .

Thus making a *conjuncta* really required the singer to imagine a complete hexachord order in a position in which it would not normally occur, that is 'outside the hand.' A *conjuncta* F# therefore implied a *ficta* hexachord based on D, and a *conjuncta* A♭ a hexachord on E♭. Our modern 12 chromatic notes in all their enharmonic guises were theoretically well-known even to medieval theorists, and as Karol Berger has suggested, the acceptance of at least 5 chromatic steps was widespread in music before 1500,[46] with B♭ (as a *recta* note), F#, C#, E♭ and A♭ all available as *mi* or *fa* steps of hexachords based respectively on F (*recta*), D, A, B♭ and E♭, the last four of which were said to exist 'outside the hand.'[47]

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[46] See Berger's article, "Common and Unusual Steps of *Musica Ficta:* A Background for the Gamut of Orlando di Lasso's *Prophetiae Sibyllarum.*"

[47] Berger also notes that even before 1500, opinion was beginning to become divided on the identity of G#/A♭, with a gradually greater acceptance of the need for G# (and therefore a hexachord based on E) for use in cadences on A. This lay behind the tendency for many musicians to prefer a *ficta* sub-semitone alteration on such cadences, rather than the *recta* suprasemitone one, involving Bb/G in the approach to the octave unison. See Berger, Musica Ficta, 52-55.

CHAPTER 3

Hexachordal choices

The application of a hexachordal system potentially implies a certain flexibility of 'tonal' focus, as the use of the soft hexachord should always be considered an option. There is nothing in any treatise I have read which in any way suggests this hexachord should be used less frequently than the other two, so one might imagine that roughly a third of the time the soft hexachord would be utilised.

If one tries to place oneself in the position of the Renaissance singer examining his own part as he reads the music, visual cues suggesting the use of the soft hexachord are easily imagined. Singers would naturally attempt to make their solmisation of any given passage as straightforward as possible, eschewing an unnecessarily large number of mutations unless called on to make these for specific reasons. Undoubtedly certain such visual cues would have become ingrained (in similar fashion as the solmisation process itself) by constant repetition, and the way in which they read the music itself.[1] Assuming unsignatured parts,[2] paramount amongst these are the following, which, it should be added, are no less valid for the modern singer reading this music:

1. **Passages where F and B (a tritone apart) are both included in close proximity.**
2. **Passages which feature F as their lowest note.**

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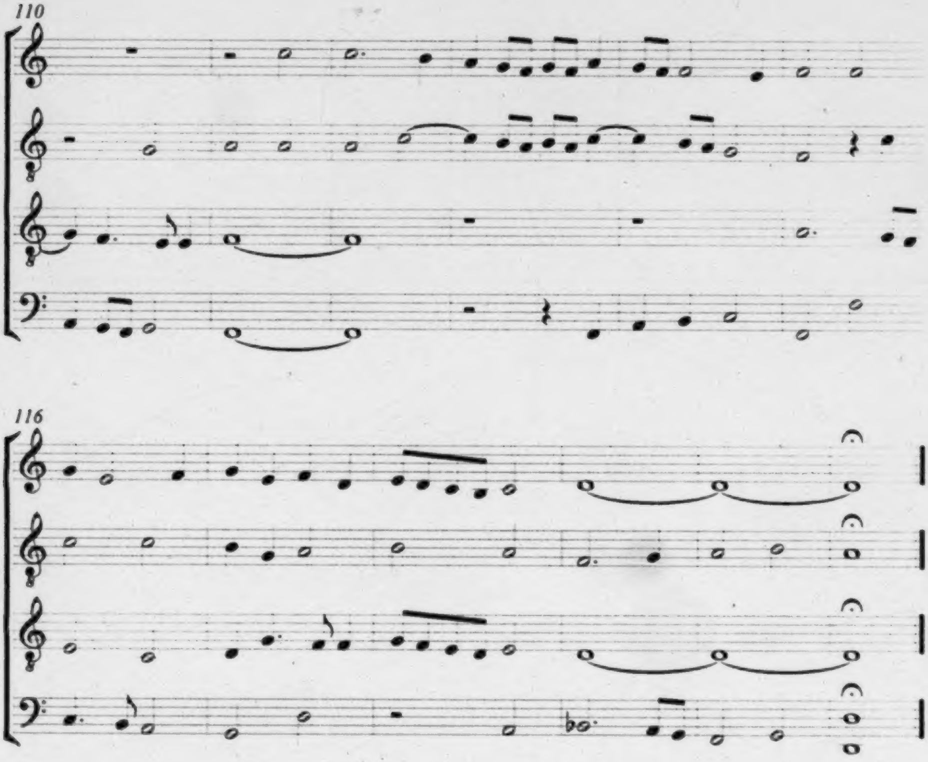
[1] Just as modern singers, for example, scan other parts in a choral score for helpful information about how to correctly sing their own part, surely Renaissance singers would have become particularly adept at scanning their own part (and possibly even others at the same 'opening') for cues such as, for example, potential cadential passages, or necessary mutation points.

[2] For signatured parts, the appropriate transpositions of the points to follow would apply.

3. Passages which ascend or descend – often in predominantly stepwise motion – from, or into, the range immediately below F, and which include F as a key harmonic tone.[3]

The first two of these points are well illustrated in the following, taken from the final *Agnus* of the *Missa Tous les regrets*. Here is the passage unaltered:

Example 2



Consider these parts firstly as linear entities. The *contratenor* could be interpreted as lying comfortably within the soft hexachord for the whole of the excerpt, while the *discantus* clearly looks to be divided into two sections (mm. 111-115, and mm. 115-121) based on the soft and natural hexachords respectively - each time with a sub-semitone.[4] The *tenor* is equally straightforward, as its compass lies entirely within the natural hexachord, while the *bassus* seems to naturally lie within the soft hexachord. These factors, combined with the ingrained mistrust of the melodic tritone, make the choice of the soft hexachord here inevitable. Thus this passage, with other *ficta* alterations taken into account, should sound as follows:[5]

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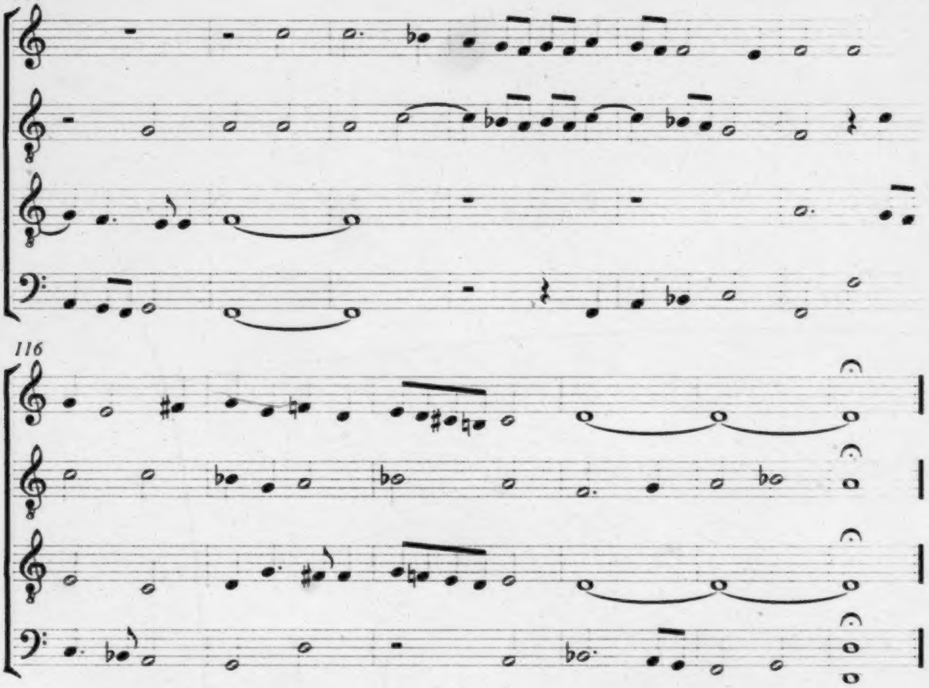
[3] This last point is derived from the fact that the natural hexachord order, with the soft following the natural, would have been the most logical means to ascend in a roughly step-wise manner, especially if F *ut* were included as a key note in the phrase, with a mutation from the natural hexachord to the soft easily achievable on either G *sol re*, or A *la mi*.

Example 2a



Turning to the third of my above identified points relating to visual cues, examples of both these aspects occur frequently, such as here in the *Agnus* of the *Missa inviolata:*

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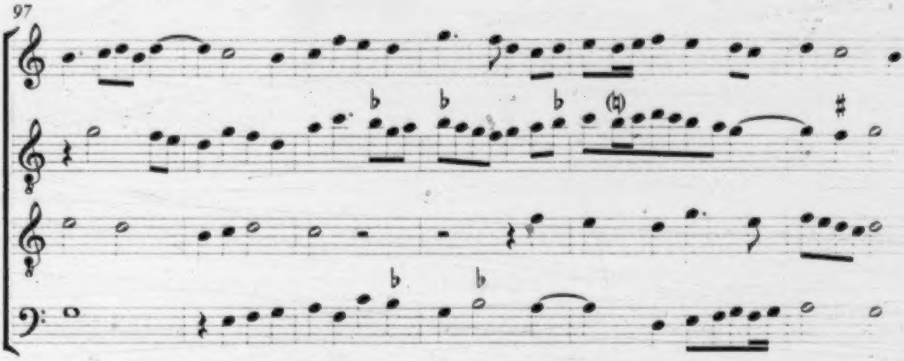
[4] At the approach to the final note, the singer would in all likelihood recognise a linear ornamented leading tone motion, suggesting a leading tone cadence on D. Issues such as this will be considered in detail later; in the meantime, see the Example 2a which gives my 'solution' to this section.

[5] My realisation of measure 117 is arguable here. Some may disagree with the cross-relation between the *discantus* and the *tenor*. I believe the individual parts support my reading, however, and that the linear make-up of these parts is more important than harmonic considerations. The purpose of the example, in whatever manner this measure is realised, is unchanged, however, as it addresses hexachordal choices elsewhere, not the *ficta* I have applied in this specific instance.

Example 3



In the section leading up to and including measure 97, the *bassus* had existed comfortably in the range of the natural hexachord on C; however, in measure 99 the range of this hexachord is exceeded, requiring a mutation into either the next adjacent hexachord - the soft hexachord on F - or the non-adjacent hard hexachord on G. In this case the inclusion of F, C and B in three consecutive pitches in measure 99 strongly suggests the soft hexachord, as does the general look and shape of the passage in this measure and the next. The bass singer would surely have found his choice aurally vindicated by the fact that the *contratenor* would similarly have been forced into this hexachordal choice at the very same time, for reasons explained by the first two of my points above. This is surely no coincidence.

Similarly, somewhat earlier in the same movement, the bass singer, surveying his part ahead of time, would surely have suspected the soft hexachord to apply in the following *descending* passage (mm. 26-27), which also succeeds in avoiding the melodic tritone, after which a mutation into the adjacent natural hexachord is required for a logical solmisation of the end of the phrase (mm. 27-28):[6]

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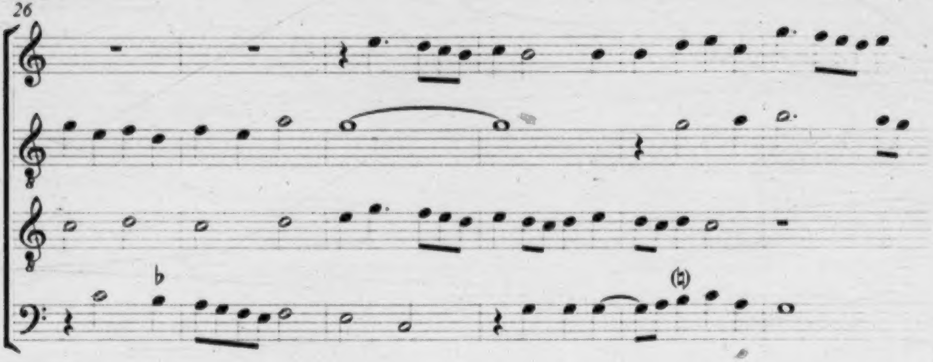
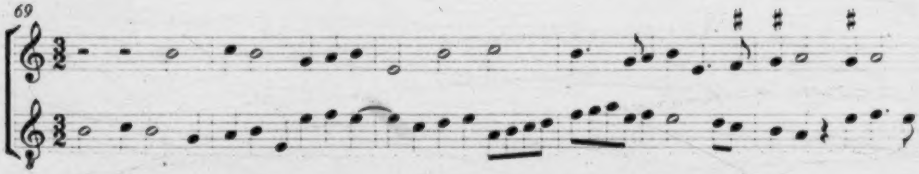
[6] Even the next section of the bass line (mm. 29-32) would probably have initially been thought of as lying within the soft hexachord on F, with the B♮ in m. 30 and the F# in m. 32 added later as probable leading tone alterations. In this case the B♮ could even be thought of as *ficta* in a sense. Note also that the final note in m. 28 of the *discantus* appears in Keahey's edition as an A. Examination of the part by itself, as well as the likelihood that it should reflect parallel sixth movement with the tenor, suggest to me this is an error, and that the note should in fact be a B. I have made this alteration in Example 4.

Example 4



Clearly there are some situations in which other issues also bear on the 'look' of the music. Sometimes, for example, the prevailing mode can affect how the composer manipulates his part-writing, especially in relation to the *tactus*. In the following example from the *Missa Sancta Dei genitrix* the prevailing phrygian modality identifies the E–B perfect fifth as pivotal to the construction of the counterpoint. Added to this must be considered the fact that both E and B often occur on key beats of the *tactus*. None of the B's in the following example therefore resemble candidates for alteration via the soft hexachord.[7]

Example 5



Even assuming the extremely dubious correctness of the *contratenor* in measure 72,[8] the direct B-E fifths in both parts do not allow the use of the soft hexachord even had the singers found a problem in rehearsal with the direct harmonic tritone created here. Correction could not possibly have been achieved by B♭, as this solmisation would make no sense. This sort of example is one in which I would suggest even the most inexperienced singer would be totally confident of the correctness of the hexachord choice that visually presented itself on first reading.

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[7] This is surely *visually* obvious to an experienced performer of this music, whether the Renaissance singer reading in original notation, or the modern singer reading in modern notation.

[8] I believe there is either a scribal error here which has not been picked up by Keahey in his recent edition (Davison, Keahey and Kreider, Opera Omnia, vi, p. 18), or a misprint in that edition. The melodic jump in the *bassus* in m. 72 is clearly incorrect, not only because it thereby creates this very wrong-sounding tritone with the *discantus*, but also because the four-note rising-then-falling figure which completes this ascending run is so very common in music of this type, and hardly ever would it

In this chapter, discussion has focussed on issues underlying hexachordal choices. My purpose here has not so much been to exhaustively investigate the exact mechanisms singers would have applied in making such choices, but simply to suggest that the use of the soft hexachord would have been a natural, and, in many cases, automatic process for these singers. For the modern scholar interested in this music, this suggests the addition of one flat beyond the key signature should be a routine and indeed quite frequent occurrence.

As perhaps the key issue underlying hexachordal selection is the concept of *mutation,* it is now necessary to examine the mechanics of how this was achieved in greater detail.

Mutation from one hexachord order to another (within the hand) was achieved by the mental re-orientation brought about by thinking of the pivot note - a note that existed in both hexachords - in one of its 'other' guises. In the stepwise ascending pattern which follows, for example, if D *sol* in the hard hexachord is reinterpreted as D *re* in the natural hexachord, the progression from the low G to the A a ninth above it exemplifies a straightforward mutation from the hard to the natural hexachords:

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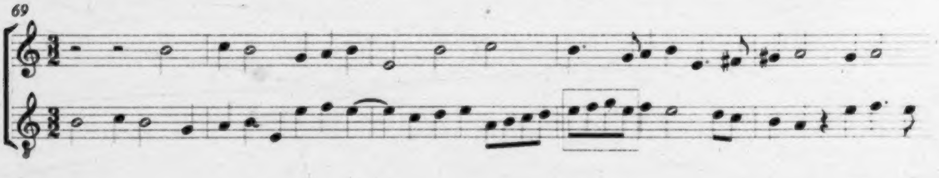
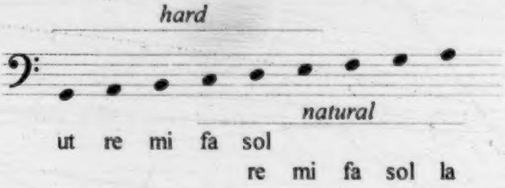
involve the compass of a *fourth* rather than a third. Here is the whole passage as I believe it should sound, not only with this passage corrected, but also with the *ficta* I believe is also required:



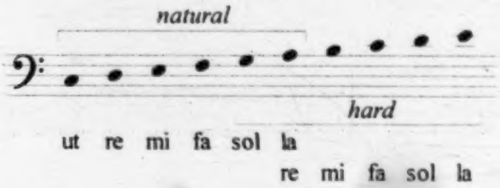
Example 6



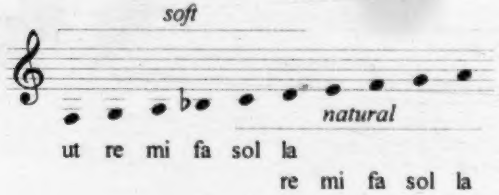
Just which syllables were suitable for use in mutation seems to have been a matter of widespread disagreement amongst theorists of the period relevant to our discussion. The most rigid of these interpretations is exemplified by figures such as Guilliaud (1554), who contends that ascending mutations should only use the syllable *re*:

> In order to ascend from the from the naturale [sic] into the durum [Example 6a], and from the hexachord molle into the naturale [Example 6b] one must sing *re* after sol; and in order to ascend from the hexachord durum into the naturale [see Example 6 above], and from the hexachord naturale into the molle [Example 6c] one must sing *re* after *fa.*[9]

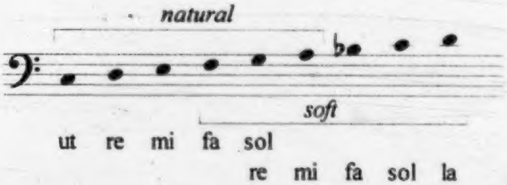
Example 6a



Example 6b



Example 6c



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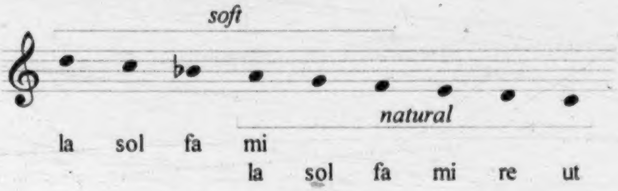
[9] Maximilian Guilliaud, Rudiments de Musique Pratique (Paris, 1554), quoted in Allaire, Theory of Hexachords, 48.

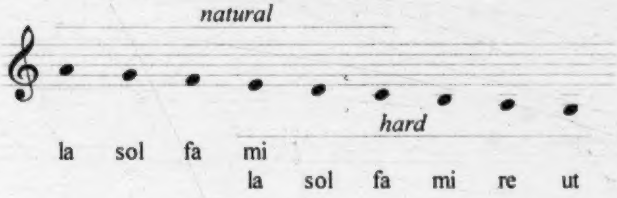
Similarly, in descending, Guilliaud counsels only *la* should be used:

> In order to descend from the hexachord molle into the naturale [Example 6d], and . . . [from] the naturale into the durum [Example 6e] one must sing *la* after *fa;* and in order to descend from the . . . durum into the naturale [Example 6f], and from the naturale into the molle [Example 6g] one must sing *la* after *mi.*[10]

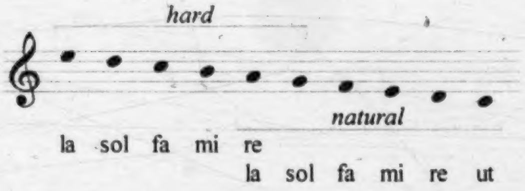
Example 6d



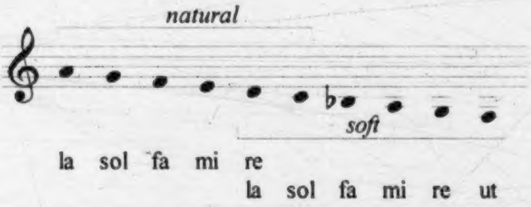
Example 6e



Example 6f



Example 6g



Note that Guilliaud offers no advice at this stage on how mutation from the hard to the soft hexachords, or vice versa, should occur; indeed stating that "it is never proper to the nature of the hexachords molle and durum to be interlocked."[11] I believe Allaire rightly interprets this statement as not in fact prohibiting such an interlocking, rather, recognising that "mutual interlocking is not an *attribute* [italics mine] of the hexachords molle and durum",[12] an interpretation which recognises the practical fact that these two hexachords do indeed interlock on occasions, and indeed must do so.[13]

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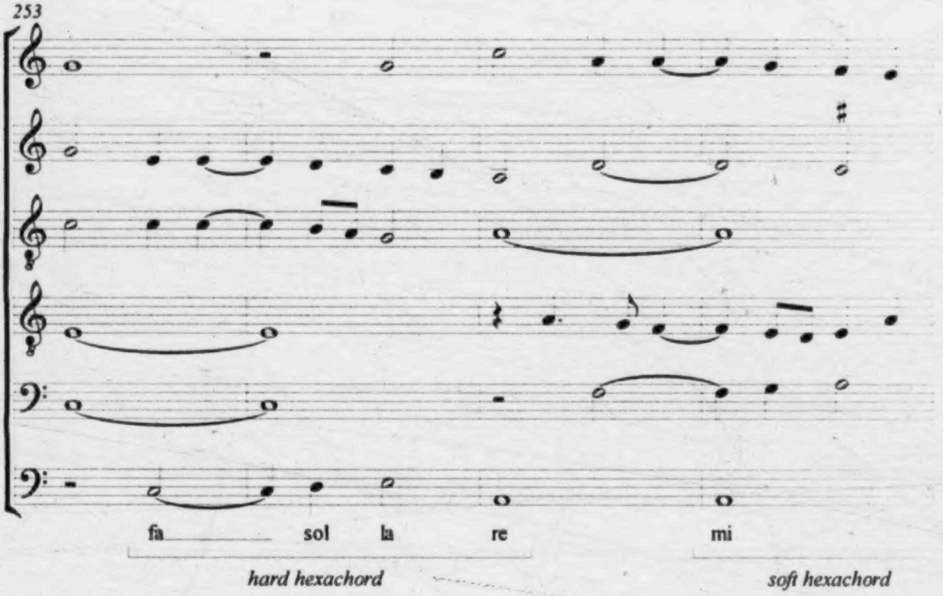
[10] Guilliaud, Rudiments quoted in Allaire, Theory of Hexachords, 48.

The following signed example from the *Credo* of la Rue's *Missa Ave Sanctissima Maria* clearly shows a practical example of where the hard and soft hexachords must interlock:

Example 7



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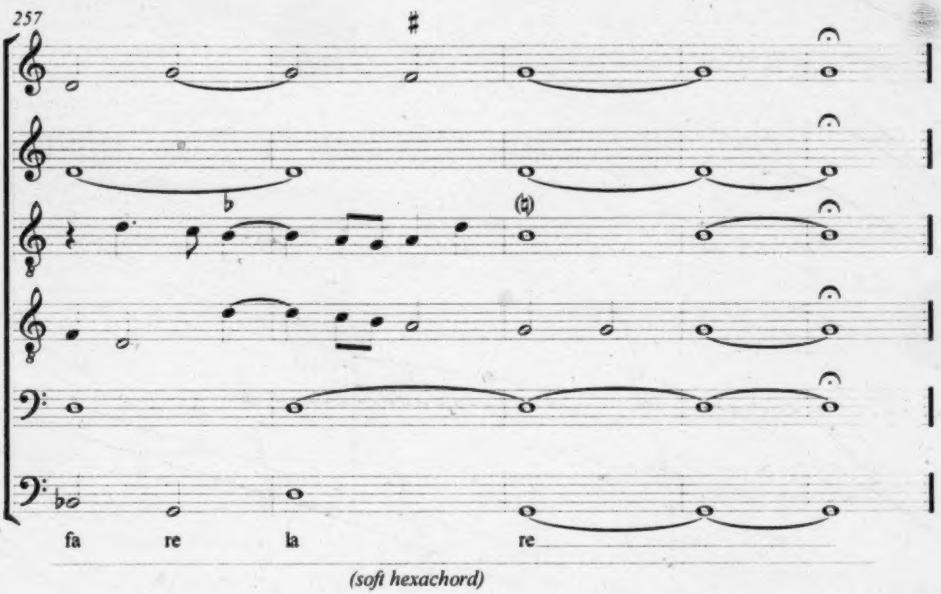
[11] Guilliaud, Rudiments quoted in Allaire, Theory of Hexachords, 47.

[12] Allaire, Theory of Hexachords, 47.

[13] In a later corollary to his 'rules' of mutation, Guilliaud admits as much directly: "However, should it happen that excessively frequent mutations of *mi* into *fa* be required, and that it be in *B-♭♭-fa-♮-mi*, the hexachord durum may be changed into that of molle, although this is against the usual rules of mutation." Guilliaud, quoted in Allaire, Theories of Hexachords, 53.



While probably useful as a starting point for students, Guilliaud's 'rules' do not represent the wider musical practice of the period in which we are interested, and if they were to be universally applied, a significant amount of this music would simply be impossible to solmise. Although there was undoubtedly a hierarchy of practical places in which a mutation could occur, actual composers used a far more liberal approach to mutation, which in effect allowed such mutations to occur at *any* place where multiple 'names' exist, or can be imagined.[14] Tinctoris (1477), a relatively conservative figure, in fact admits as much, saying "all solmisation syllables are capable of mutation, but some more than others."[15]

Already in 1318 Marchetto recognised that mutation could be made "in any location where two or three syllables or notes are different in name but are subsumed under a single letter";[16] and Gaffurio (1496), Ramis (1482) and Tinctoris (1477) all give quite exhaustive explanations of how these mutations may have been achieved. For the purposes of the analytical discussions which will follow, however, it will suffice to say that a more liberal approach than that reflected by Example 6 will be assumed.

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[14] This would refer to mutation into and within a purely *ficta* environment.

[15] Tinctoris, Tractus de musica, quoted in Allaire, Theory of Hexachords, 49.

[16] Marchetto, 281.

There is one final issue to be dealt with before moving onto matters associated with *musica ficta,* and that involves the concept I will refer to as *fa super la.* I will deal with this widely recognised practice in the present chapter, which concentrates on the issues of hexachordal choice and mutation, as it is implicitly bound up with these concepts, not with *musica ficta,* as is often suggested in modern commentaries on this issue.

This convention, which probably grew out of the desire to avoid the linear tritone in chant in much earlier times, is well stated by Guilliaud in 1554:

> Whenever a note exceeds the sixth degree-syllables by a second, this seventh note must be called *fa* without making mutation into the next hexachord. This note must be sung flat even in the absence of any flat sign before or above it, unless the natural sign were to affect it.[17]

If one considers hexachord order, the point at which mutation is forced between the *hard* and the next adjacent hexachord in ascent (the *natural* hexachord) occurs at the semitone between E and F. Thus the interlocking of these two hexachords always allows for a minor seventh above G *ut.* The *fa super la* 'rule' in effect allows for a similar semitonal extension above the other two hexachords: - B♭ above the natural hexachord, and E♭ above the soft hexachord. What particularly interests me in this regard, therefore, is Guilliaud's assertion that the step is made 'without making mutation', which would therefore allow the E♭ above the soft hexachord to effectively be considered as a *recta* rather than *ficta* alteration - at least in cases where this rule applied.[18]

Guilliaud is not alone in his contention that *fa super la* is accomplished *without* a mutation being effected; at least two other theorists also state this quite categorically:

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[17] Quoted in Allaire, Theory of Hexachords, 45.

[18] The ramifications of this aspect will be further addressed in relation to the *Missa l'homme armé* at a later stage.

Yssandon (1582): And should the melody move beyond the *la* by no more than a second, we must say *fa,* without making any mutation.[19]

Finck (1556): For a note ascending above *la,* do not make a mutation, but always *fa* is sung in this, unless this ♮, or this # may be marked.[20]

That the convention of *fa super la* was in place well before this time, however, is clear from the following from Ornithoparchus' *Musice active micrologus* of 1517, describing the interval of a seventh:

> The Seventh, Whensoever a Song ascends from D *sol re* to A *la mi re* by a fift, mediately or immediately [either by step or leap], and further onely to a second, you must sing *fa* in ♭ *fa* ♮ *mi* in every *Tone,* till the song do againe touch D *sol re,* whether it be marked or no.[21]

Even earlier references to this convention or its precursors have been discussed by Allaire, Carvell and Berger.[22] One reference which has seemingly received no recognition or commentary is that of the obscure late 14th century theorist Johannes Hollandrini, whose advice concerning how to correctly render chant pertains to exactly the same issue:

> Note how to know when we must sing round *b* and when square #. Whenever in the first and second mode we do not reach high c, we must always sing round *b;* that is, whenever in solfaing [solmising] or singing together we do not ascend above round *b,* so that we need not to ascend to high c or above, we mutate only by round *b.* But when we reach high c and if it is necessary to mutate on higher, we mutate always with a square #, and at the moment we leave the quality of square #, we accept that of round *b.*[23]

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[19] Jean Yssandon, Traité de la Musique Pratique, divisé en deux perties, (Paris, 1582), quoted in Allaire, Theory of Hexachords, 51.

[20] Hermann Finck, Practica Musica, (1556) Biblioteca Musica Boloniensis, Sezione II, No. 21 (Bologna: Forni Editore, 1969). Quoted in Carvell, "A practical guide to *Musica ficta:* based on an analysis of sharps found in the music prints of Ottaviano Petrucci (1501-1519)." Doctoral Thesis, Washington University, 1982, 35.

[21] Andreas Ornithoparchus and John Dowland, A Compendium of Musical Practice (New York: Dover Publications, 1973), 135. (Note the spelling here is from Dowland's 1609 translation).

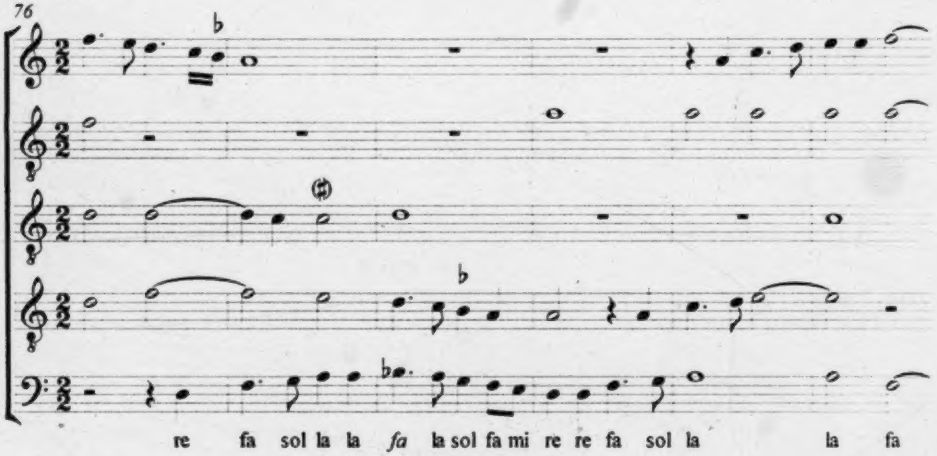
[22] Allaire, Theory of Hexachords, 46. Bruce Carvell, "Notes on *Una nota supra la.* In Music from the Middle Ages through the Twentieth Century: Essays in Honour of Gwynn McPeek, ed. Carmelo Comberiati and Matthew Steel (New York: Gordon and Breach Science Publishers, 1988), 94-111. Berger, Musica Ficta, 77-79

[23] Iohannis Hollandrini, Opusculum de musica ex traditione Iohannis Hollandrini. A Commentary, Critical Edition and Translation, trans. Alexander Rausch (Ottawa: The Institute of Medieval Music, 1997), 95.

That the concept was widely known and accepted during this extended period can hardly therefore be doubted, and in virtually any major composition there are numerous examples of its applicability, whether to avoid a linear tritone - to “make either the melody or harmony more elegant”[24] - or simply to contribute to greater economy of solmisation.

In general practice, the rule effects the introduction of B♭ (in a non-signatured composition) as *una nota super la* above the natural hexachord, as here:

Example 8



In this example, from the *Credo* of the *Missa Ave Maria*, the *bassus* in measure 78 moves momentarily one step above the range of the natural hexachord, and the *fa super la* B♭ is signed in the source. This allows the whole *bassus* passage to be solmised in the same hexachord, as marked - the B♭ *fa* alteration being accomplished without mutation.

In Example 8 above, there is no possible confusion as to whether this is truly a case of *fa super la* and not just a mutation into the soft hexachord, as the range of the *bassus* immediately after the alteration descends back below the compass of the soft hexachord.[25]

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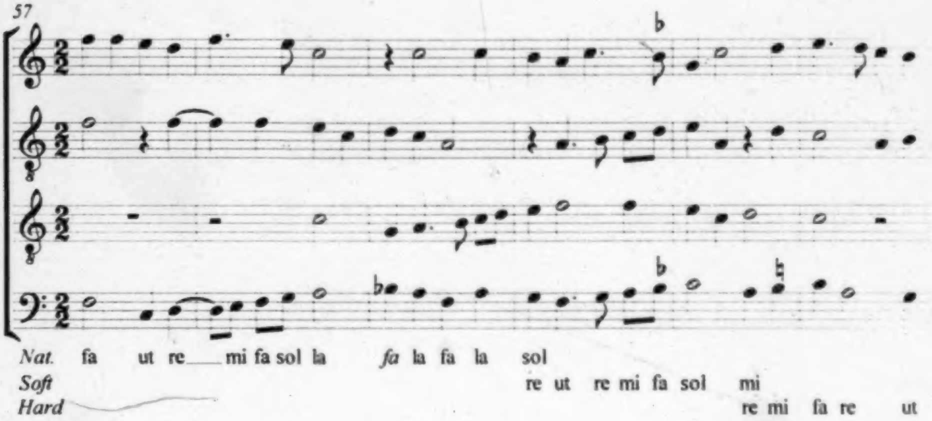
[24] Carvell, “Notes”, 110.

[25] It should be noted that the suggested B♭’s in the *other* parts, however, represent selection of the soft hexachord, rather than *fa super la*.

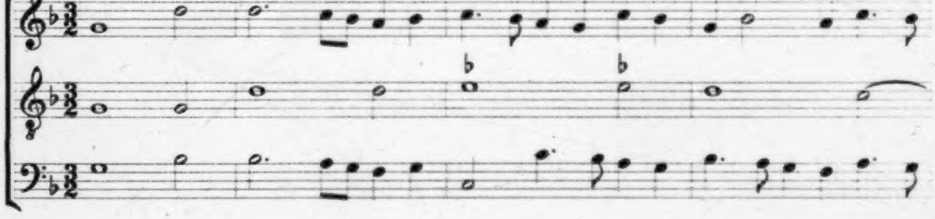
The close kinship between the concept of *fa super la* and mutation into the soft hexachord in many other cases often sees a *fa super la* progression only either delaying or foreshadowing a mutation into the soft hexachord, such as here (from the *Kyrie* of the same work):

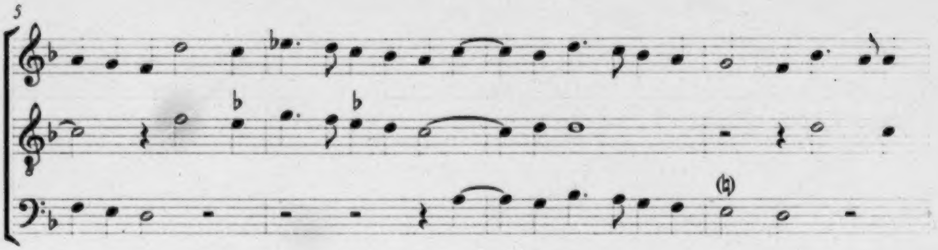
Example 9


57
Nat. fa ut re mi fa sol la fa la fa la sol
Soft re ut re mi fa sol mi
Hard re mi fa re ut

In compositions with a signature of one flat, E♭ becomes *recta* in the soft hexachord. E♭ also becomes a likely alteration as *fa super la* above the natural hexachord on F, as in the following example from the opening of *Sanctus* of the *Missa Puer natus est nobis,* in which the E♭ in measure 6 of the *discantus* is actually signed in the principal source:

Example 10





In the above example, the only possible hexachord choice for the *contratenor* (middle line) at the opening is the natural hexachord on F. The whole of the first phrase - up until measure 5 - is solmisable in this hexachord with the use of *fa super la*. Since exactly the same can also be said for the *discantus* (and the E♭ in m. 6 is actually signed), the composer's intentions for both these parts seem clear: the alteration is also required in the *contratenor*.

It should be noted that in Example 10 above, *fa super la* is used for two different reasons. In the second instance, the signed E♭ in measure 6 is clearly utilised to avoid the melodic tritone which would otherwise have resulted within the same measure.[26] The E♭ in the *contratenor* in measure 3, however, is *not* used to modify a melodic tritone, as within this phrase there is no B♭. Let us consider this in the light of Berger's somewhat imperious pronouncement on the issue:

> In sum, there are many in the sixteenth century who apply the rule of 'fa above la' indiscriminately, but knowledgeable musicians remember that the rule is merely a spin-off from the prohibition of the tritone. . . . Whether we will want to apply the rule independently of the tritone prohibition when editing or performing sixteenth-century music will depend on whether we will want to follow the most enlightened

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[26] Within a hexachord it is impossible to create a melodic tritone, however, when a hexachord is extended by the use of *fa super la*, the possibility of a melodic tritone between *mi* and the *fa* extension becomes very real. In this example a melodic tritone either between E♭ and A, or E♮ and B is unavoidable. One can only assume – as a result of this peculiarity of *fa super la* - that the E♭ to A would have been more familiar, and therefore preferable to E♮ to B. This is supported also by the fact that solmisation of the former is far more easily imagined than requiring the use of a *ficta* hexachord on G to upwardly alter the B♭ here.

> musical opinion of the period or rather imitate what seems to have been an unsophisticated but fairly common practice.[27]

While I believe it is true that the convention of *fa super la* is most often used to temper the melodic tritone, the example above clearly shows this is not always the case. Whilst certainly not wishing to advocate any lack of sophistication in approaching this issue, I believe the application of this rule can be, and often is, relevant to passages which do not involve the tritone. Only experience in recognising the particular melodic constructions for which semitonal extension above a hexachord order is indicated can act as a reliable guide when evaluating possibilities - a task which should be approached on a case-by-case basis.

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[27] Berger, Musica Ficta, 78-9.

CHAPTER 4

Practices associated with *musica ficta*

From the very earliest theoretical treatises, the necessity for *musica ficta* has been associated with two basic concepts: the need to keep perfect consonances perfect, and for the sake of beauty. I find the second of these, in which this highly technical procedure is so strongly associated with aesthetic principles, particularly fascinating, as it is true that one of the most consistent associations made with *musica ficta* concerns this concept of 'beauty,' and how chromatic alteration possessed the power to add beauty to any musical work. As early as Marchetto (1318), the chromatic realm is referred to as the "color of beauty."[1] Ugolino of Orvieto also used similar language in 1430 to more fully describe why *musica ficta* had been invented, also reiterating the dual concepts described above:

> But the reason for ficta is twofold: in order to have sweeter harmony on imperfect consonances and also in order to colour a dissonant interval to bring it closer to perfection. The former cannot be doubted by any intelligent and knowledgeable man because, by adding either the ♭ or ♮ - according to the accompanying melodic line of the music – a most sweetly made harmony arises for the ears.[2]

This view is echoed by Yssandon:

> The reason why musicians have discovered musica ficta.
> There are two reasons: firstly, out of necessity, and secondly because of the sweetness of the music and the delight of the ears.[3]

Virtually all later theorists – Aaron (1516), Gaffurio (1496), Sancta Maria (1565), Bermudo (1555), Tinctoris (1477), Zarlino - similarly refer to this distinction between avoiding unwanted dissonance as a matter of necessity, and introducing other alterations for purely aesthetic reasons.

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[1] Marchetto, 151.

[2] Ugolino, quoted in Hughes, Ficta in Focus, 31.

[3] Yssandon, quoted in Allaire, Theory of Hexachords, 54.

Two terms – *causa necessitatis* (on account of necessity) and *causa pulchritudinis* (for the sake of beauty) – are often used to describe these two sides of *musica ficta,* and in the discussions which follow, I will use these terms as generic descriptors when justifying specific decisions. Although these terms were not originally designed to be used in this way, I feel their close association with – respectively – technical and aesthetic concerns, makes them ideal to fulfil this role.

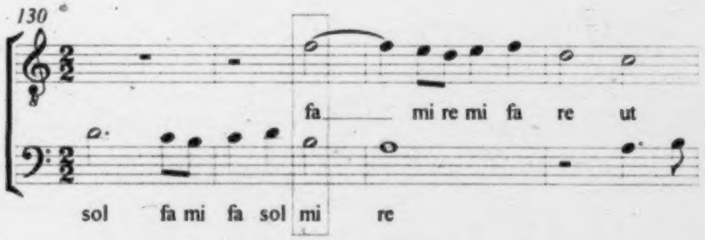
Interestingly, in their discussions of *causa necessitatis,* theorists cite a number of exceptions which allow dissonant sounds, depending on the situation. Thus any examination of this issue also requires, and indeed is often dominated by, consideration of these exceptions. Just such a two-sided examination now follows.

(i) *Causa necessitatis*

Mi contra fa

One of the most consistently cited concepts in Renaissance theory is the so-called *mi contra fa* rule - as it pertains to perfect consonances. In effect it is this rule which enables harmonic octaves and fifths[4] to remain perfect. Consider the following example from the *Benedictus* of the *Missa O gloriosa Margaratha:*

Example 11a



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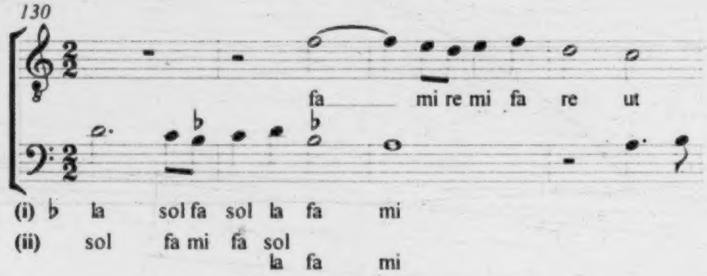
[4] In many instances a fifth between one part and another is mirrored by the simultaneous use of upper or lower octave doubling creating a fourth with another part; which is much the same as saying the inversion of the fifth is also always kept perfect.

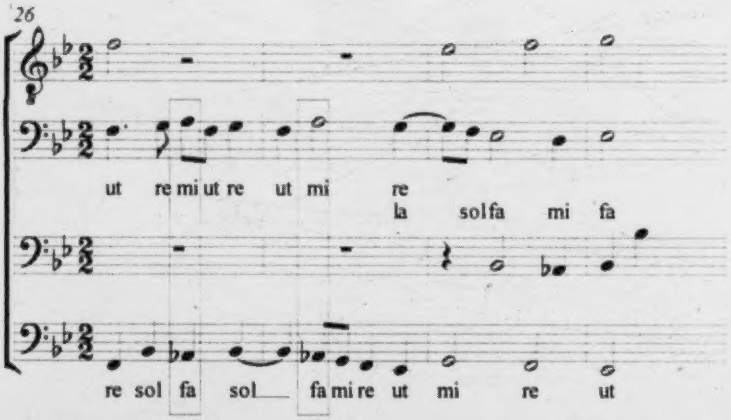
If left unaltered, as would perhaps have been the case on an initial read-through, the above results in a very obvious *mi contra fa* at the tenor entry. The tritone here would have been immediately obvious to the singers, even if actual solmisation syllables had *not* been in use, and subsequently would have been corrected by one of the following methods:[5]

Example 11b



The next example, from the motet *Absalon, fili mi,*[6] shows the same principles in action in the case of octaves:

Example 12a



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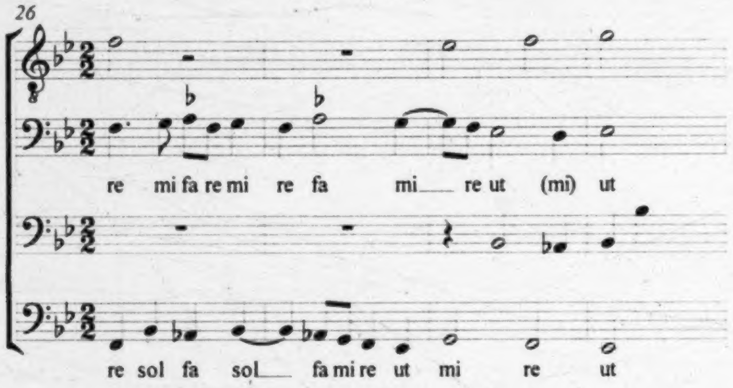
[5] The process of rehearsal and experimentation would suggest method (i) to be the more likely, as this would retain soft hexachord solmisation for the whole phrase, rather than mutating within the phrase, as method (ii) - commencing in the hard hexachord and moving to the soft – would require.

[6] Now more securely ascribed to la Rue than any other composer, including Josquin. See Jaap van Benthem, "Lazarus versus Absalon. About Fiction and Fact in the Netherlands Motet." Tidjschrift van de Vereniging voor Nederlandse Muziekgeschiedenis xxxix (1989): 54-82. Nigel Davison, *"Absalom fili mi* reconsidered." Tidjschrift van de Vereniging voor Nederlandse Muziekgeschiedenis xlvi - i (1996): 42-56. Honey Meconi, "Another look at Absalon." Tidjschrift van de Vereniging voor Nederlandse Muziekgeschiedenis xlviii/1 (1998): 3-29. Joshua Rifkin, "Problems of Authorship in Josquin; Some Impolite Observations with a Postscript on *Absalon, fili mi."* Proceedings of the International Josquin Symposium, Utrecht 1986, ed. W. Elders (Utrecht 1991), 45-52.

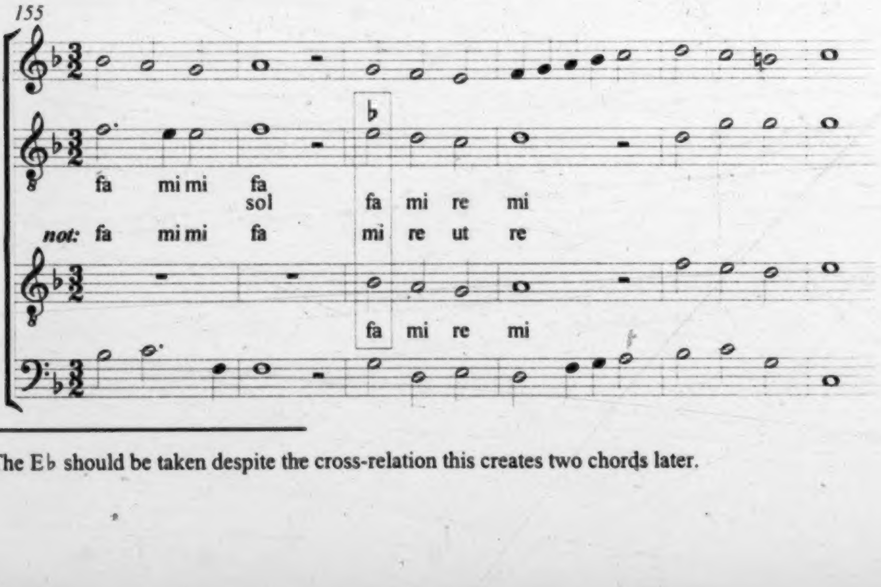
In this instance, the A♭'s in both the *bassus* parts are signed in the source, and therefore the above solmisation could never work, creating two glaring cases of *mi contra fa* augmented octaves. The following is the only logical solution for this passage:

Example 12b


26
re mi fa re mi re fa mi re ut (mi) ut
re sol fa sol fa mi re ut mi re ut

One further example will suffice to show how fourths are affected by this rule, especially in compositions of more than two parts. In this example, from the *Credo* of the *Missa Sancta Anna*, the signatured B♭ in the *tenor 2* requires the alteration of the E in the *contratenor* (now a *recta* E♭) to avoid *mi contra fa* between the two parts:[7]

Example 13



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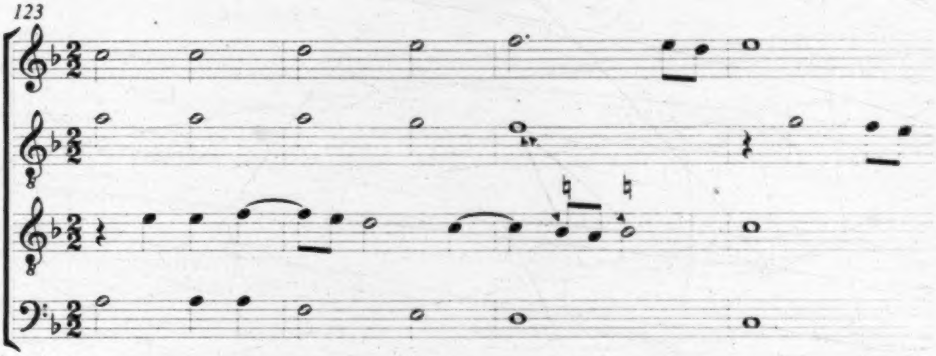
[7] The E♭ should be taken despite the cross-relation this creates two chords later.

There is one important instance in which *mi contra fa* is tolerated, however, and this involves a certain cadential progression of the type exemplified in the following, also from the *Credo* of the *Missa Sancta Anna:*

Example 14



In this particular example, the dual demands of the sub-semitone in the *tenor 2,* combined with the major sixth to octave progression with the *bassus,*[8] take precedence over *mi contra fa,* a fact which is well established by contemporary theoretical practice. This style of cadence, involving a suspension, is one of a number of related types in which Bermudo (1555), for example, allowed the diminished fifth.[9] Zarlino, too, suggests that "at times the semidiapente is used in counterpoint instead of the diapente, and the tritone in place of the diatesseron, both with good effect."[10] He counsels caution, however, in this usage:

> We must take care, however, that the semidiapente or tritone be preceded immediately by a perfect or imperfect consonance. The semidiapente is then tempered by the preceding and following consonance in such a way that the effect is no longer poor, but good, as experience has proved.[11]

That this sort of usage was common in this period is confirmed by various writers, for example Bermudo (1555), who states that it is "commonly used in cadences",[12] giving an example of the same type as that which appeared as Example 14:

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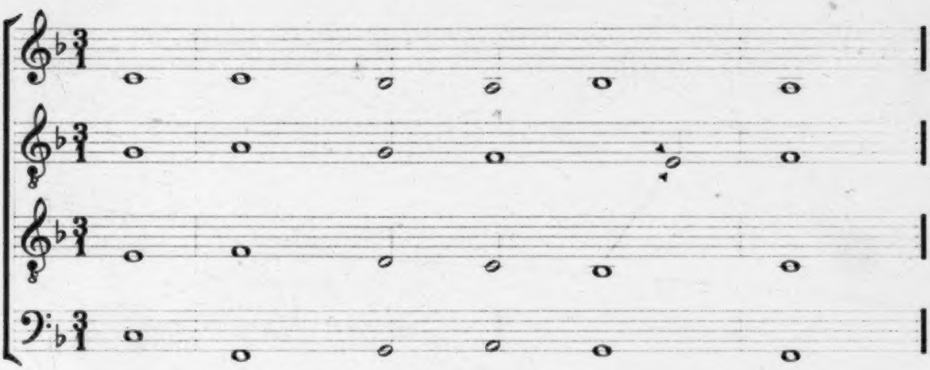
[8] See the *causa pulchritudinis* discussion to follow in part (ii) of this chapter.

[9] See Toft, 28-9.

[10] Zarlino, 47.

[11] Ibid., 68.

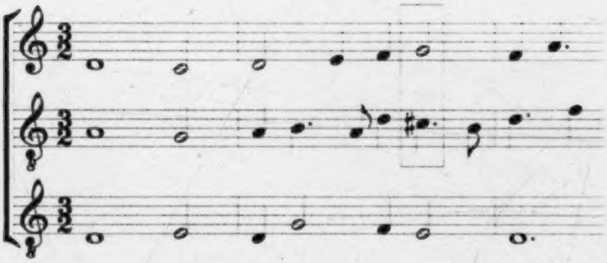
Example 15



That the practice was also well established before the turn of the 15th century can safely be assumed from the following, somewhat reproachful remarks from Tinctoris in 1477:

> Indeed, perfect concords which are made imperfect or superfluous by a chromatic semitone, that is, by alteration, must be avoided, although I am aware that almost all composers use these above all or half or a larger part of the note defining the measure and immediately preceding a perfection in a composition of three or many voices, as follows here:[13]
>
> [The relevant section of Tinctoris's example now follows]

Example 16



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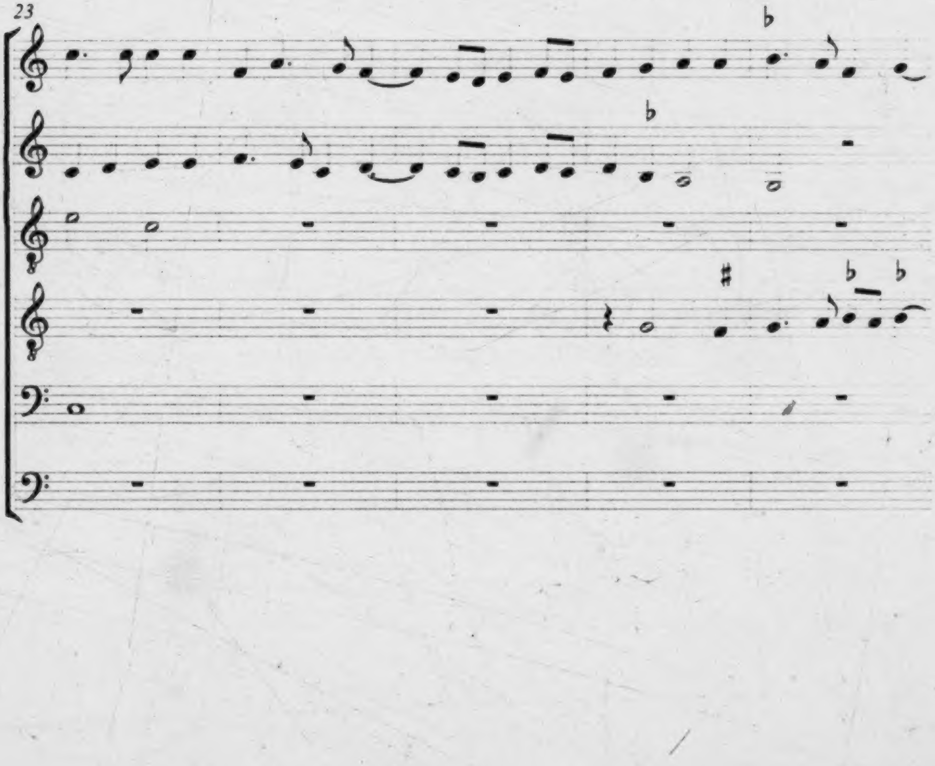
[12] Juan Bermudo, The *Declaracion de instrumentos musicales* of Fray Juan Bermudo, trans. Of Book V by Vinson Claire Bushnell, Masters Thesis, Eastman School of Music at the University of Rochester, 1960, 156.

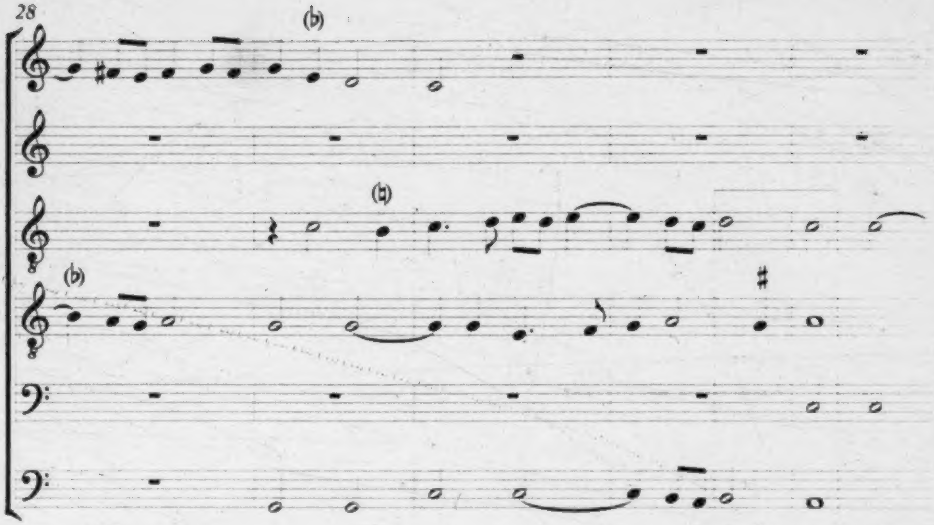
[13] Johannes Tinctoris, 131.

Clearly both Examples 14 and 15 above, and now Tinctoris's example, are all of similar construction: in which the bass part proceeds to the root of the finalcadential chord by descending step, while the other key functional part proceeds to the octave above via contrary motion. Some form of suspension is usually present, normally between the two functional parts (as in example 14), but occasionally with another part, as in Tinctoris's example.

There are a number of progressions which strongly resemble those described above, but in fact differ in subtle but important detail, as they do not actually contravene the *mi contra fa* rule; the tritone dissonance being created between *mi* and a note of name other than *fa*. This finds wider application in more abstract passage work, such as the following, from the *Gloria* of the canonic *Missa Ave Sanctissima Maria:*

Example 17





In this passage, the consistent application of differing varieties of leading-tone progressions implied from measures 26-27, 28-29 and 29-30, all combine to make the leading-tone cadence incorporating a tritone at measures 31 to 32 more likely than the suprasemitone *recta* alternative.[14] As suggested above, however, this is not a *mi/fa* dissonance in this instance, rather *mi/sol*, as the *tenor 1* is solmised entirely within the hard hexachord here.

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[14] In passages such as this, with no flat in the signature, Berger has presented convincing evidence that, contrary to the view of Bent and Hughes in particular, the leading tone progression is more likely to be applicable than that involving the supra-semitone, even on A cadences (see Berger, Musica Ficta, 139-147). This will receive further treatment in part (iii) of this chapter - concerning sub-semitone progressions.

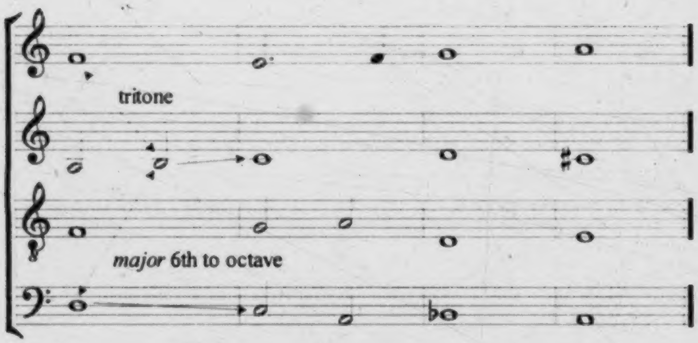
Other situations in which vertical dissonance is tolerated

The relationship of the previous example with the prohibitions associated with *mi contra fa* raises the question of whether these were the only instances in which dissonance such as the harmonic tritone was allowed to prevail. There is significant evidence to suggest this is not the case, albeit evidence which, as in the following from Tinctoris (1477), comes somewhat by way of negative assertion:

> Indeed, we ought to avoid the false unison and the false diapente, and the false octave and any other false concord caused either by the lack or overabundance of a major semitone, for this is the reason it is taught by masters to their students from the beginning that they do not introduce *mi* against *fa* in perfect concords. Nevertheless, I have discovered the opposite most frequently among many, many composers, even the most famous, . . . [15]

More specific, non-cadential cases in which the tritone in particular is tolerated, are suggested by a number of theorists. Bermudo (1555), for example, allows progressions such as the following, as the dissonance is passing:

Example 18



The theorist's comments on this example are particularly instructive:

> The second minim of the contra alto is a tritone with the first semibreve of the tenor, yet because the contrabass sounds an octave on Cfaut with the contra alto on csolfaut, and since it is [reached by] a sixth, which must be major, the tritone is

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[15] Tinctoris, Counterpoint, 130. Tinctoris then goes on to name Faugues, Busnois and Caron.

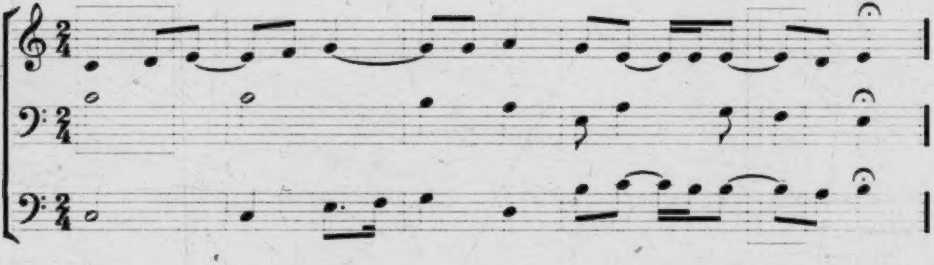
> allowable. . . . [therefore] The common use of the tritone is in passing, especially when it seeks the octave.[16]

Zarlino too allows such passing progressions, as the syncopated dissonance "is for many reasons hardly grasped by the ear;"[17] and this concept of aural perceptibility recurs in the writings of a number of other theorists, Gaffurio's comments in his *Practica musicae* (1496) being typical:

> But when a discord is concealed by means of syncopation and by the very rapidity of a passage, it is permitted in counterpoint. This occurs in almost all composition . . .[18]

Gaffurio (1496) then gives an example in which not only a tritone, but also a major second and a major seventh are all presented as syncopated passing dissonances:

Example 19



Also interesting with regard to how dissonance was viewed during this period, is the following, from Gaffurio:

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[16] Bermudo/Bushnell, 156. Bermudo goes on to observe the fairly self-evident fact that the tritone cannot be avoided by raising the tenor F to F#, as this would create an imperfect octave with the soprano. Clearly the idea of altering *both* notes is out of the range of possibility for him. This example is interesting from another point of view as well; as it gives further credence to the view that the 6th to octave progression should be made major – on account of *causa pulchritudinis* - in *all* feasible cases, not just a cadence points. This is an issue which is a taken up in part (ii) of this chapter.

[17] Zarlino, Counterpoint, 233. Many other theorists admit harmonic dissonance when it is passing, although the degree to which this 'passing' is admitted seems to vary quite widely. See Tinctoris, 113-128; Jacobs, 284-6; Toft, 28-31. One's suspicion in this instance, however, is that Zarlino is referring to progressions in which the passing dissonance is more fleeting than the one which occurs in the above example, which surely would by quite *readily* 'grasped by the ear'.

[18] Gaffurio, Practica, 137-8.

> Besides the syncopated type there is also the hidden discordancy in counterpoint: that which is included and made obtuse among the several concordant parts of a composition.[19]

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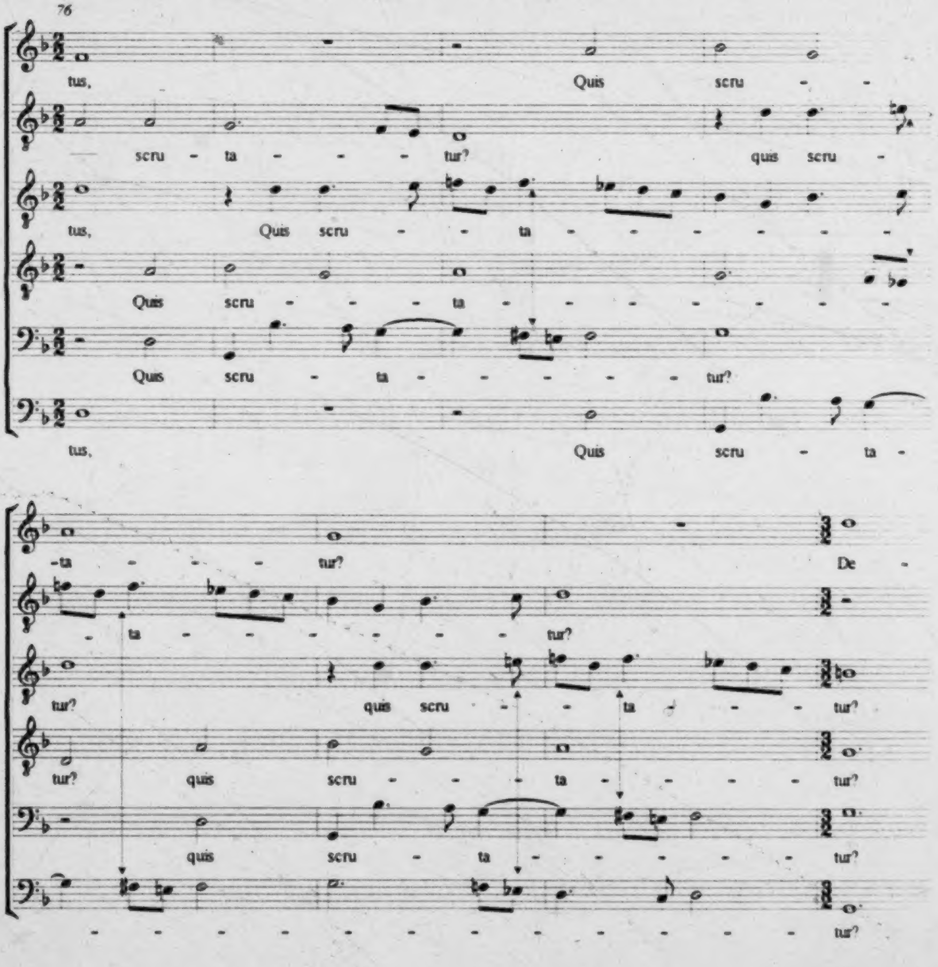
[19] Ibid., 139. While is does not fall within the scope of the present thesis to fully explore the ramifications of this comment, views such as this do suggest that tolerance for dissonances such as the simultaneous cross-relation may well have been higher than we have hitherto imagined. In this excerpt from Josquin's motet *Praeter rerum seriem,* for example, voice-leading, hexachordal choices and the combined action of leading-tone and *causa pulchritudinis* progressions all conspire to suggest that Josquin actually intended repeated simultaneous cross-relations here. Particularly relevant is the fact that at this point the text is describing the physical act of Mary's giving birth. On the very first occasion *Ensemble de la Rue* tried this passage in this way, all were immediately struck by the incredible tension and power of this music, an impression which has grown with subsequent performances. As Gaffurio's comments suggest, the dissonance is to a large degree subsumed in the overall texture, creating a richness and expressivity that is truly remarkable.


76
tus, Quis scru - -
scru - ta - - - tur? quis scru -
tus, Quis scru - - ta - - - - - - -
Quis scru - - - ta - - - - - - - -
Quis scru - ta - - - - - - tur?
tus, Quis scru - ta -
-ta - - - tur? De -
- ta - - - - - - - - tur?
tur? quis scru - - ta - - - tur?
tur? quis scru - - - ta - - - - - tur?
quis scru - ta - - - - - - - tur?
- - - - - - - - - - - - - - - - tur?

Melodic dissonance - in particular the tritone

While in practice the *mi contra fa* convention almost certainly also has some bearing on the general exclusion of *melodic* patterns containing a tritone, the rule does not directly address this issue. Authors generally are quite consistent in advising that the melodic form of this frowned-upon interval should not be used, only to then turn around and admit that in practice there are examples of where just such usage is justified. Aaron (1516) is typical in this respect; further, in saying that the singer "should mollify [flatten], temper, and annul it every time whether the sign of ♭ molle is given or not, excepting when prevented by inconvenience,"[20] he importantly also implies the existence of performing conventions involving the addition of un-notated chromatic alteration.

Similar sentiments are also broadly echoed by Zarlino:

> It is true there are certain melodic intervals, such as the fourth, fifth, and octave, which singers render chromatically even if the composer has not so marked them. This they do so the voice lines progress smoothly. It would indeed be superfluous for the composer to mark these accidentals, for non-harmonic intervals such as those . . . should never be sung.[21]

Like Aaron, however, Zarlino similarly qualifies these remarks by admitting that the composer "may at times, but not often, use the semidiapente melodically."[22]

That the policy reflected in these theorists' work was applicable across the span of time in which we are interested is strongly supported by Tinctoris' advice in 1476, where he suggests that while on the one hand the melodic tritone "must be avoided" in all modes, on

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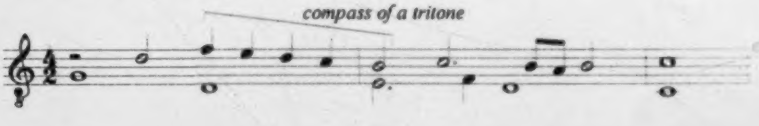
[20] Pietro Aaron, Toscanello in Music, vols. 1-3, trans. Peter Bergquist (Colorado Springs: Colorado College Music Press, 1970), 16.

[21] Zarlino, 175.

[22] Zarlino, 173. The example the theorist gives is as follows:

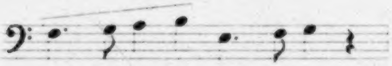


the other "it must not be overlooked, however, that in composed song, so that a fa against mi may not happen in a perfect concord, occasionally it is necessary to use a melodic tritone."[23]

Of these theorists, Aaron (1516) is perhaps the most helpful in shedding further light on this issue. He quotes a number of passages from Josquin's *Missa l'homme armé super voces musicales* to show that the melodic tritone, when followed by a falling fifth, is to be preferred over the alternative, that is, singing a direct diminished fifth:

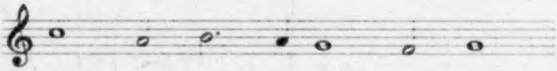
> I say that you are forced to choose between two evils the least inconvenient, which will be to say the proper mi in the said b♮ acute, although it is a lesser error to sing an imperfect diapente than a tritone. In any case these passages [such as the following example] are not easy for the singer.[24]

Example 20



He is also informative on how the singer's choices should on occasion be tempered by the consideration of other practices. Thus, whether and how an apparent tritone should be corrected can depend on harmonic considerations. In the passage which would appear to the singer as follows[25]

Example 21



Aaron (1516) states that:

> . . . although they [the B and the F] appear to be pronounced as un-tempered tritones, by the sounding of the natural syllable, mi, [that is the final F sung as F#] they are nonetheless raised because of the lower parts, . . . [as] the rules of counterpoint require that the last semibreve should be raised because of a sixth with the tenor, as in the natural raised cadence, and sung accidentally.[26]

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[23] Johannes Tinctoris, Concerning the Nature and Propriety of Tones, trans. and ed. Albert Seay (Colorado Springs: Colorado College Music Press, 1976), 11 and 13 respectively. It should be noted that the melodic diminished fifth is more easily accomodated in solmisation (by mutation between adjacent hexachords) than is the tritone (augmented fourth), which requires mutation into a *ficta* hexachord.

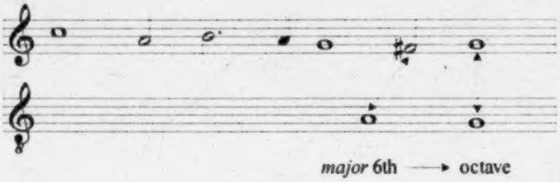
[24] Aaron, vol. 2, 15. This is the same style of example given by a number of different theorists.

[25] Remembering only part-books were being used.

[26] Aaron, vol. 2, 15

Example 22 is a scored example illustrating Aaron's point:

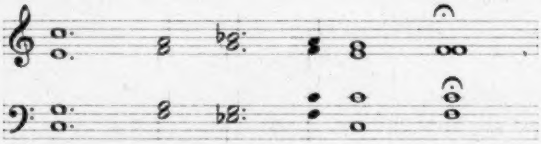
Example 22



Alternatively, Aaron (1516) suggests that what might initially appear to be the same passage could also be corrected by using the soft B in other circumstances:

> If you happen to find that the composer has *another intention* [italics mine] about the last fa [the last F], then you will be correct in changing it [not the F, but the solmisation of the passage], especially if the composer wishes to have an octave above his close, like this:[27]

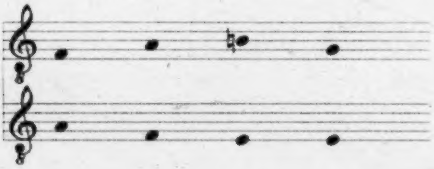
Example 23



Tinctoris's analysis (1477) of the issue similarly raises harmonic considerations, once again mitigating a difficult situation by the 'lesser-of-two-evils' rationale. In this case, however, the argument is in favour of the incorporation of the melodic tritone:

> Then, to signify where I normally out [sic] to be sung in order to avoid the tritone, but where mi must be sung, I believe that the sign of the hard ♮, that is square ♭, must be prefaced, as is proven here.[28]

Example 24



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[27] Ibid., 16.

[28] Tinctoris, Counterpoint, 83.

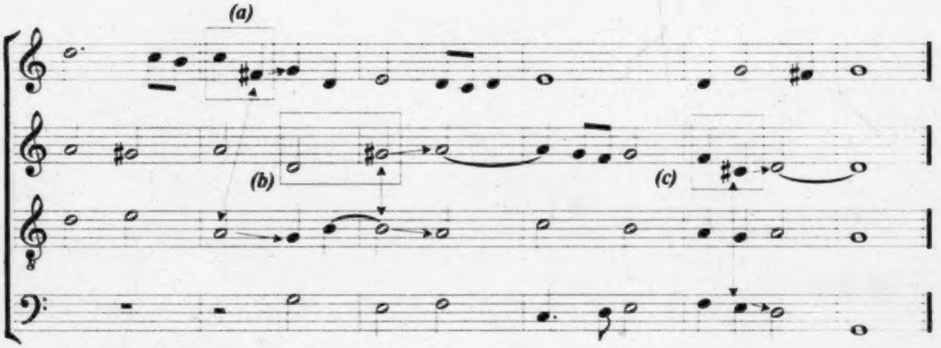
It seems these arguments present what can perhaps be considered a 'mainstream view' of this issue. By no means do they represent a strong consensus, however. Bermudo (1555), for example, is much more liberal in his approach,[29] with diminished intervals playing a more prominent role than might have been expected:

> Let what I say about this forbidden interval [the diminished fourth] be understood for the others [including the tritone/diminished fifth]. Take as an infallible rule that if such movement is prepared, having no impediment, all these intervals may well be used and it is not contrary to semichromatic art, which is that *sung* [italics mine] and played in these times.

Consistent with this, harmonic voice-leading is also often an important issue:

> The soprano [Example 25(a)] made a movement from ccsolfa to the sharp of ffaut acute and it was a semidiapente. I sharped the note for it went to an octave with the tenor on gsolreut, and it [the interval between the two parts] had to be a *major* [italics mine] sixth. . . . The contra alto [Example 25(b)] made a tritone . . . from dlasolre to the sharp of gsolreut, for it went to an octave with the tenor on alamire. It also made [a diminished fourth] because it came to an octave with the contrabass on Dsolre [Example 25(c)].[30]

Example 25



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[29] Although it is difficult to make authoritative judgement, it seems that the approach to the introduction of chromatic inflection was possibly more adventurous in Spain than anywhere else in Europe. While it is nonetheless instructive to examine the work of the two main Spanish theorists, Bermudo and Santa Maria, application of their theory to the music of other centers should be particularly carefully judged. See also Jacobs, "Spanish Ficta," 277.

[30] Bermudo/Bushnell, 154.

(ii) *Causa pulchritudinis*

In most theoretical treatises, authors speak of the necessity for a perfect consonance to be preceded by an imperfect consonance which is as close as possible to that ultimate perfection, and in both Toft and Berger many of these are elucidated at some length.[31] The consistency with which this concept is treated attests to the validity of these practices over a long period of musical history, allowing us to more readily accept doctrine which in some cases significantly post-dates the period in which we are specifically interested.

Zarlino's treatment of this issue represents its most succinct summation:[32]

> One should proceed from one consonance to another by means of the nearest. . . . . So, to go from a sixth to an octave [Example 26a], the sixth must be major, because the major sixth is closest to the octave, . . . This rule must be observed not only when the parts move in contrary motion, but also when one voice remains stationary and the other voice ascends or descends two steps [Example 26b]. Similarly, when the sixth is to move to a fifth [Example 26c], it must be minor; for the minor is closer than the major. This is particularly important when one voice is stationary [Example 26d]. When we wish to progress from the third to the octave [Example 26e], we must use the major third, because it is closer to the octave than the minor; and the parts must move in contrary motion, one conjunctly and the other by leap. Moving from the third to the fifth when one voice stands still [Example 26f], the third must be major. But the third will be minor, especially in two-voice writing, when the voices move in conjunct contrary motion [Example 26g(i)], or when both descend, one by leap and the other by step [Example 26g(ii)]. In the first case, the minor third, although more distant, is used to avoid the relation of the tritone between the parts.
>
> When from the third we wish to arrive at the unison (which is the basis of all the consonances, if not actually numbered among them), the third should always be minor – this being closer – and the parts should move in conjunct contrary motion [Example h(i)]. If the parts are to ascend together, one by step and the other leaping, the third should always be major [Example h(ii)]. When one part stands still, and the other leaps, the third will always be major [Example h(iii)].[33]

As Zarlino does not directly exemplify these progressions, I have done so in Example 26 – to which the above locators apply:

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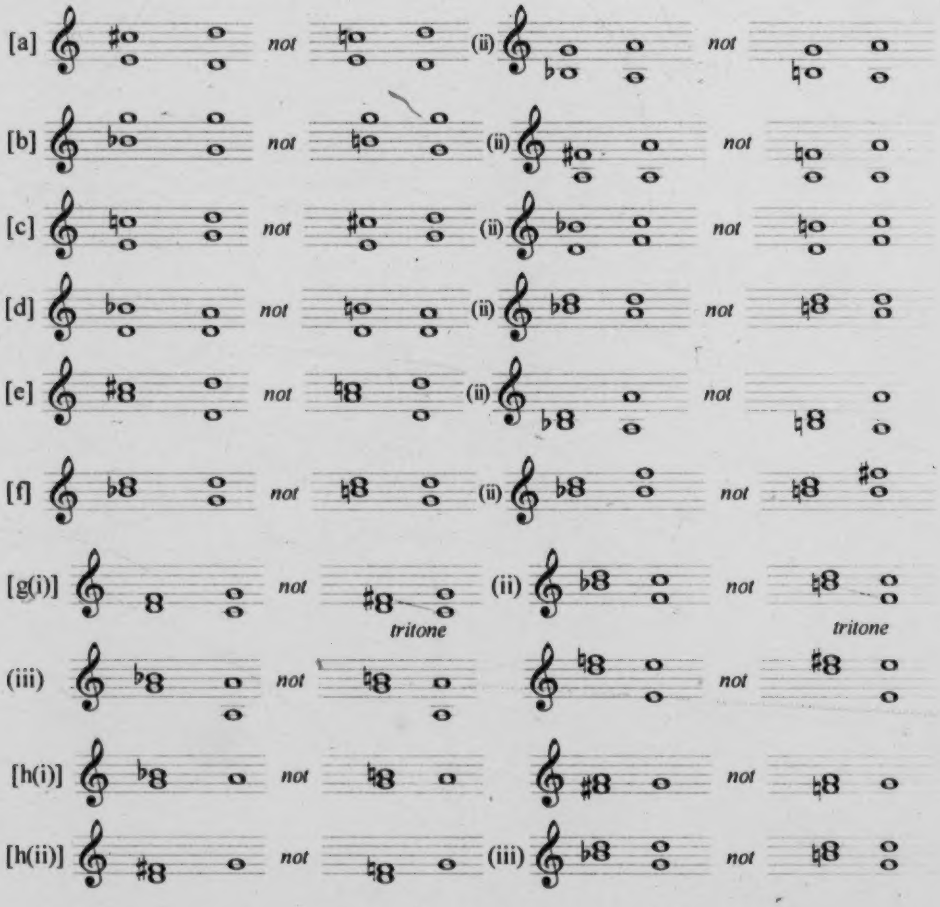
[31] Toft, 16-26. Berger, Musica Ficta, 122-139.

[32] It is surprising that this issue, and Zarlino's handling of it, has not been dealt with in greater depth by modern scholars of this subject. Even in Karol Berger's book, while this passage is mentioned in part, it seems to me its full ramifications are somewhat scantily represented.

[33] Zarlino, 79.

Example 26



While these examples are not exhaustive, they do provide guidance for the most commonly encountered problems involving *recta* B♭'s; as well as *ficta* F#'s and C#'s. The same theory can apply for any instance, however, and transposed versions of these progressions may well involve the other *ficta* alternatives widely recognised for this period, namely E♭, D♭ and A♭ (as well as G#).

Our first example, [26a] above, illustrates a 'rule' which clearly works in close relationship with the practice of raising the leading tone at returning note figures. This ***subsemitonum*** convention will be discussed in greater detail in part (iii) of this chapter. For the moment, it only needs to be noted that the approach to the octave via the *major* sixth is, in theory at least, equally well satisfied by the lowering of the bottom voice, creating a *suprasemitone,* leaving a sub-tone in the upper voice. This is a solution which in many instances, including the example above, does not require *ficta* alteration, rather simply B♭, which is a purely *recta* alteration. The progressions of category [26e] and [26h(i)] are similar in this regard.

Both versions of [26b], as well as [26h(iii)], receive comparatively little attention from modern commentators, who seem to concentrate predominantly on progressions which feature step-wise movement.[34] Another important group of progressions which also appear to be routinely neglected by modern musicologists is the class of progressions represented by category [26d]. As both singer and conductor of music of this period, I find this type of progression particularly noticeable when unaltered, as the reiteration (or prolongation - in many cases the note which remains the same is sustained over the course of the progression) of one pitch is so easily heard in relation to the movement of the other. This is especially obvious in progressions approaching *final* cadences, where the movement from *major* sixth to fifth virtually always requires alteration. Once the distinctive *sound* of this progression becomes ingrained, however, I personally find it is difficult not to similarly alter even non-cadential passages.

It should be noted at this stage that Zarlino does not specifically mention the type of progression I include as [26d(ii)] above, in which the *major* third moves to a perfect fourth.[35] This is a progression which is commonly encountered, especially between the inner voices of a polyphonic composition. In this instance, if one inverts the parts, the progression is then revealed to be identical to the first of [26d], in which the *minor* sixth proceeds to the fifth. It seems the *major* third expanding to a fourth is a logical corollary of the *minor* 6th ⇨ 5th convention, and it is certainly one which in my experience seems to require alteration time and time again. This is entirely consistent with the principle of a perfect consonance being approached by the nearest possible imperfect consonance, as the fourth was regarded by most contemporary theorists as a perfect consonance.[36]

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[34] See Nicholas Routley, "A practical guide to *musica ficta*." Early Music (February 1985), 66. The illustrations of this practice here reflect only the most common progressions of this type.

[35] Both when the upper note is sustained, as in this example, or when the lower note is sustained.

As Carvell has noted, the need to alter progressions of the type at [26g(ii) and (iii)] was known to Jehan de Murs (1330) in the early fourteenth century.[37] The first [26g(ii)], like both examples in category [26c] are clearly indicated to avoid tritone relationships between parts. The second [26g(iii)], on the other hand, is a fairly straightforward variation on the first example in category [26h(i)], a progression whose characteristic leap of a seventh in the lower voice made this progression most uncommon after the middle of the fifteenth century.

Perhaps the most vexing question in the entire area of *musica ficta* is the extent to which doctrine governing the conduct of progressions such as these should alter the music as it has come down to us. This is an area about which there seems to have been some controversy even in the sixteenth century; disputation which has shown no signs of being resolved even now.[38] Put most bluntly, the problem comes down to deciding whether alteration in compliance with these theoretical ideals should be adopted as a matter of general policy, or should only apply in clear-cut cadential progressions.

As this is such a key issue, I will now take some time to set out the reasons behind the policy to which I will adhere in the edition presented here, and why I believe this is one which is justified by both the theory and aesthetics of the period.

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[36] Although apparently not without some disagreement. See particularly Zarlino, 12-16.

[37] Carvell, "Notes," 102.

[38] The most famous related 16th century example being the dispute between Nicola Vicentino and Vicente Lusitano in Rome in 1551 over a singer's interpretation of certain added accidentals.

In presenting some of the theoretical evidence in this area, it is reasonably clear that Berger is of the opinion that these precepts cannot be universally applied.[39] Although there certainly seems to exist some hierarchy of importance when considering *all* these progressions in any given passage, I believe that application of these precepts should be more widespread than he implies.

There is no direct mention in treatises before *c.* 1500 that the rule about the approach to perfect consonance by the nearest possible imperfect consonance should be qualified in any way, and indeed a number of important theorists well after this time consider this to be universally applicable. Bermudo (1555), for example, states that the general principle applies "not only to *clausulae* but also to all the places in which perfect consonances are approached in any manner whatsoever."[40] Toft has also advanced evidence which supports this interpretation, citing the writings of an earlier theorist, Ramis de Pereia (1482), who gives a non-cadential example which not only observes the rule, but also does so at the expense of creating a diminished fifth.[41]

Zarlino too, argues that the rule should always apply:

> Nature, which has jurisdiction over everything, has so designed that not only those with musical training but the unschooled and even farmers – who sing after their own fashion, without reasoning about it – are accustomed to progress from major sixth to octave, as if nature had taught them. This is most obvious in the cadences throughout their music, as all musicians can hear. Perhaps it is what persuaded Franchino [Gaffurio] to venture to say that the cadence is the only place where the major sixth must progress to the octave, because there the composition comes to a close. But to me it appears to contradict the remark I quoted from him just above [to the effect that 'it is the nature of the major sixth to go to the octave and of the minor sixth to go to the fifth']. If we are to obey the natures of these two intervals, I can only conclude that he said it thoughtlessly. Therefore it shall not be lawful to pass from the major sixth to the fifth, nor from the minor sixth to the octave. For neither interval is natural to the consonances involved.[42]

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[39] See Berger, Musica Ficta, 122-130.

[40] Juan Bermudo, *Declaracion de instrumentos musicales* Book IV, quoted in Toft, 18.

[41] Toft, 21

[42] Zarlino, 83.

This sort of evidence, combined with practical experience, has led me to believe that contrapuntal interaction should as often as possible be interpreted in terms consistent with these progressions, which are, after all, merely a detailed manifestation of a set of aesthetic values. As this issue is so closely tied up with that which involves the use of leading tone progressions, however, I will reserve further justification of this position for the section which immediately follows.

As foreshadowed earlier, it now only remains to be stated that in the chapters to follow, I will often refer to the justification for individual decisions in terms of *causa pulchritudinis*, by which I mean an adherence to one or other of the progressions of Example 26.

(iii) Sub-semitone, or leading tone progressions

I have already made mention of the complementary relationship existing between many of the progressions of Example 26 and the convention of the *subsemitone*. It is common knowledge even amongst the most conservative of editors that the raised leading tone in returning note figures, that is, *re-ut-re, sol-fa-sol,* or *la-sol-la,*[43] was "commonly supplied in non-cadential passages."[44] Almost invariably in this music, such figures occur in counterpoint with another voice, proceeding the final approach to an octave or unison in a manner consistent with Examples 26[a] and 26[h] in particular. It is surely no coincidence that the primarily horizontal impetus for the application of the sub-semitone should so neatly concur with these harmonic precepts.

Perhaps the degree of confusion and dissent which accompanies attitudes concerning how this rule should be applied comes from widely differing conceptions of what the term 'cadence' really means in this music.[45]

---

[43] That is, in effect, on D, A, G, C and E, although this last was very rare on account of the phrygian mode.

[44] Toft, 24-5. Toft cites clear examples from Gaffurio, Ramis and Santa Maria here.

[45] The term *clausula* is synonymous with 'cadence' for our purposes here.

The most useful study so far of that which constitutes a cadence appears in Berger, who himself suggests the "a full history of cadences is yet to be written".[46] It seems reasonable, however, to accept his six-point summary of the features which contribute to our being able to recognise such a cadence. These points, often intertwined with one another, are briefly paraphrased as follows:[47]

1. A cadence signifies a certain measure of closure.
2. It is a musical punctuation of sorts.
3. Rests may often follow.
4. The octave (or unison/double octave) is an essential component (along with the sorts of preparatory progressions with which we are currently dealing).
5. The final harmony should fall at the start of a mensural unit.[48]
6. Cadences may be evaded in various ways.[49]

In reality, although polyphonic music of more than two parts often features progressions which, in isolation, would comfortably satisfy all or many of these requirements, other parts often tend to erode the subjective impression of closure, or sense of text punctuation, by their independence from the two functional cadential parts. Voices are often therefore seemingly 'out of sync' for this reason.

It is my contention that, in such passages, the two parts whose function seems cadential should always still be treated as if their role were clearly so. A number of theorists provide evidence in support of this position. Santa Maria, for example, when speaking about returning note figures, advocates the alteration of all such passages "because they *look* [italics mine] like *clausula,* the sound of which is always sharped".[50]

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[46] Berger, Musica Ficta, 138. See also the greater discussion: pp. 127-138.

[47] The full discussion which includes these points can be found in Berger, Musica Ficta, 122-154.

[48] In general. I believe this is too rigid an interpretation.

[49] Which is not to suggest that such cadences should be treated any differently with regard to chromatic alteration.

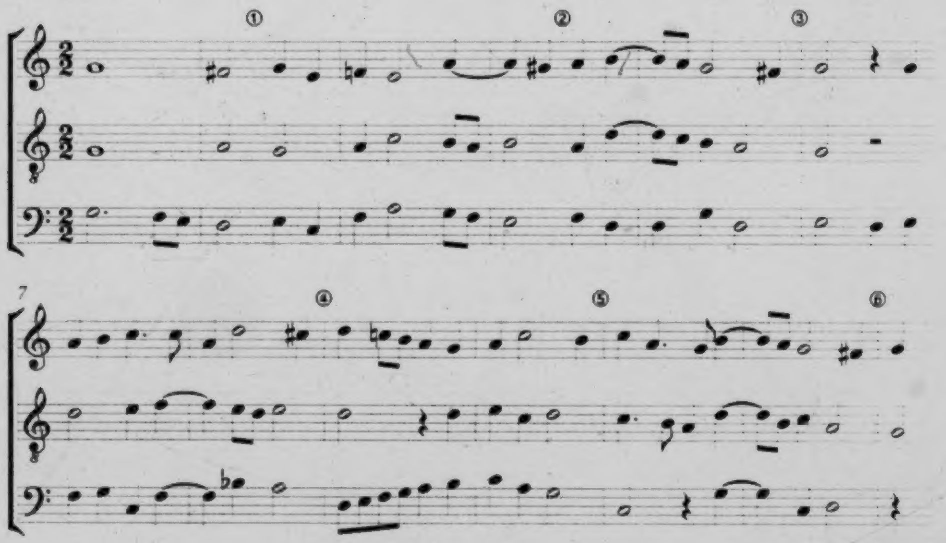
[50] Tomás Sancta Maria, Arte de tañer fantasía, (Valladolid, 1565), quoted in Toft, 25.

Ornithoparchus (1517) implies much the same when speaking of the virtue of having a multitude of 'clausulis' contained within a composition:[51]

> Every song is so much sweeter, by how much the fuller it is of formall *Closes.* For such force there is in *Closes,* that it maketh *discords* become *concords* for perfection sake.[52]

The opening section only of the quite extensive example Ornithoparchus gives here should suffice to exemplify the point: that *all* such cadential patterns require alteration, not just those appearing at final or significant intermediate cadences.

Example 27



It is interesting to note how every instance of a 'clausula' in the preceding example not only involves returning note figures,[53] but also a *causa pulchritudinis* 6th ⇨ octave progression in which the sixth has been made *major.* In the light of Santa Maria's comments above, it should further be noted that within the above numbered 'clausula', there is a definite hierarchy of the strength of the sense of closure, with only number 6 taking on any really significant role as a structural marker.[54]

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[51] Ornithoparchus uses the term 'clausula'. Dowland's period English for this was 'close'; for which we can understand the term 'cadence'.

[52] Ornithoparchus/Dowland, 205.

[53] Although most involve suspension patterns, it is important to note that number 1 does not.

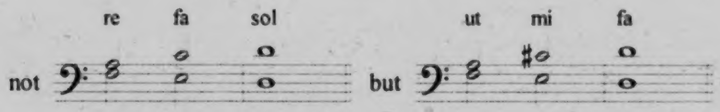
In this discussion of leading tones and their usage, there remains one particular class of progressions I have not yet mentioned, yet which on occasion calls for alteration. This involves the progression *re fa sol,* which in certain contexts should be altered to *ut mi fa,* a practice which was documented as early as 1330 by Jacob of Liège:

> Practice shows that, ascending from *re* to *sol,* singing by way of *fa: re fa sol,* the *fa* itself ought to be raised more. For, since, between *re* and *fa,* there would be no longer a tone and a minor semitone, it is made as if two tones and, consequently, between *fa* and *sol,* there no longer remains a tone.[55]

A century and a half later, Ramis (1482) draws on the writings of a contemporary, John of Villanova, to contend much the same:

> if a melody sounds *a c d* and does not return to *c,* although *re fa sol* should be said, . . . yet *ut mi fa* ought to be said, . . . the ditone may be said to be *understood.* [italics mine].[56]

It is very easy to see ways in which this type of progression would concur with the general principle of *causa pulchritudinis,* such as in the following, in which the approach to the cadential octave should be made via the *major* sixth.[57]



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[54] Interestingly also, the next strongest, number 3, is an evaded cadence.

[55] Jacobi Leodinensis, Speculum Musicae Book II, ed. Roger Bragard. Corpus Scriptorum de Musica 3, pt. 2a (American Institute of Musicology, 1961), 101. Quoted in Carvell, "Practical Guide", 29.

[56] Ramis, 93.

[57] Ramis' treatise is in fact quite fascinating in its thorough treatment of many varieties of progressions involving organum style harmony. These are remarkably consistent in applying the precepts governing the approach to perfect consonances suggested in the preceding section of this chapter. The aesthetic concepts driving Ramis' consistent application of *musica ficta* in all these cases leaves no doubt as to their wider applicability to more freely conceived polyphony. See particularly pp. 93-95 and 115-134.

In general, therefore, the position I will take, while accepting Berger's contention that it is not possible to contrive for *all* perfect consonances to be approached via their nearest imperfect consonance, is to do so as far as is reasonably possible, with octave concurrences certainly needing to be treated in this fashion. The multiplicity of leading tone progressions thereby created in this music is, for me, one of its particular fascinations, and the evidence overwhelmingly suggests that Carvell's conclusions concerning this issue are well founded: "understood semitones . . . were an expected part of performance practice for a period of more than 150 years;" their incorporation "removes much of the mystery of *musica ficta.*"[58]

Straightforward examples of leading-tone progressions abound on almost every page of music of this period. Any number of such progressions appear in examples contained within this thesis, and I will refer to many of these in a variety of contexts throughout.[59] I will therefore confine the analysis that follows to more obscure or implied instances in which I still believe this style of progression is indicated, and while in general I am reserving analytical examples from the *Missa l'homme armé I* until a later stage of this thesis, some such examples will now follow, as the opportunity to deal with these will not present itself directly in Part B.

The first such example comes in the opening *Kyrie,* and involves a section which, although it has many of the attributes of a cadence, would not have been considered a true cadence judged by Berger's above parameters.

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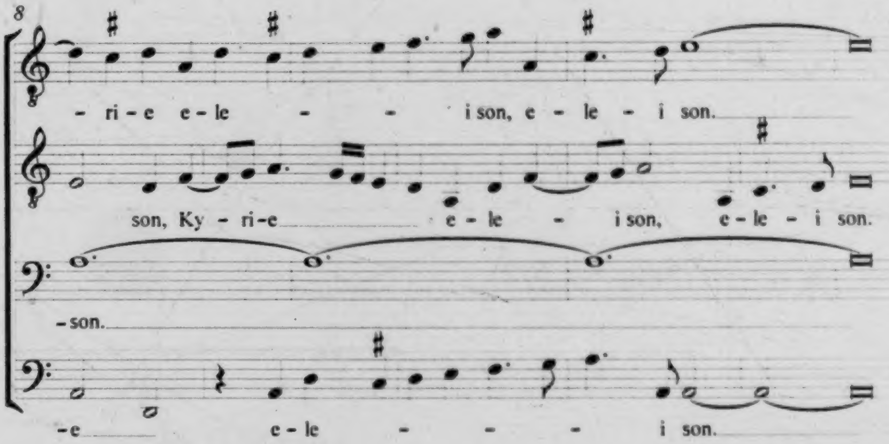
[58] Carvell, "Practical Guide," 29.

[59] In such cases the upper voice has been sharpened where possible. Where the melodic and/or harmonic context has suggested this to be unworkable, a suprasemitone in the lower part has been applied (see Example 26aii, for example).

Example 28


8
- ri - e e - le - - i son, e - le - i son.
son, Ky - ri-e e - le - i son, e - le - i son.
- son.
-e e - le - - - i son.

In this example there are two occurrences of *sol-fa-sol* in the *discantus* (at the beginning of the excerpt) - in the hard hexachord on G. I believe these probably should be sharpened even without supporting harmonic justification. It is noticeable, however, that when considered in the light of some of the interval progressions presented in Example 26, the evidence for the alteration becomes overwhelming. C# creates a *major* tenth ⇨ double octave/octave with the *bassus*; a *major* sixth ⇨ octave/*major* third ⇨ perfect fourth with the *contratenor*; and a *major* third ⇨ perfect fourth with the sustained A of the *tenor*.[60]

Another interesting form of the leading-tone cadence features some form of ornamental anticipation, suggesting that the sub-semitone should appear before it would normally be expected.[61] In some such cases the application of this ornamental inflection, when considered in conjunction with other alterations, can produce interesting results.

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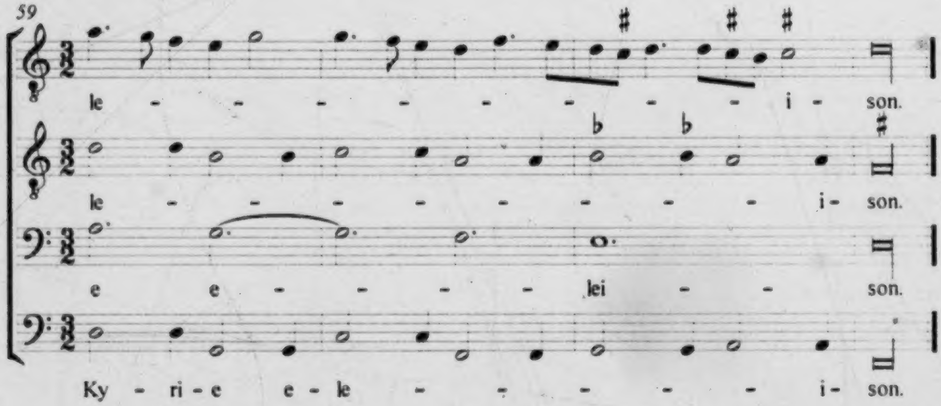
[60] These are all progressions consistent with categories [e], [a], and the corollary to [d] respectively of Example 26. The effective *tierce da Picardie* created at the end will be discussed in part (iv) of this chapter. Note also the *bassus* C# creates a *minor* third to unison progression with the *contratenor*, and a *minor* sixth to fifth with the sustained *tenor*.

[61] Normally on the penultimate note.

At the very end of the *Kyrie,* for example, my interpretation of the following cadential construction produces a direct harmonic tritone, a passing augmented second, and a melodic diminished fourth, all of which I feel are justified.

Example 29


59
le - - - - - - - - - i - son.
le - - - - - - - - i- son.
e e - - - - lei - - son.
Ky - ri - e e - le - - - - - i- son.

The penultimate measure of the *discantus* in this instance is clearly an ornamented sub-semitone pattern. The question is, at exactly which point should the C be raised?[62] I believe the duration of the *tenor's* penultimate E holds the key here. The *tenor's* progression to the E at the beginning of the penultimate measure is aurally obvious in this passage, and therefore I believe all the C's in the *discantus* should be altered to become major 6ths above this tenor, no matter how fleeting their passing nature. This is consistent with the underlying framework in existence here: an expanding major 6th ⇨ octave between the *discantus* and the *tenor* over the final two measures.

Another interesting aspect of this passage is the sequential nature of all parts, particularly the *bassus* and *contratenor,* strongly suggesting B♭ in the *contratenor* at the beginning of the penultimate measure. This is further supported by two other strong indicators:

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[62] That it should be raised is supported by the major 6th ⇨ octave progression created in conjunction with the tenor part.

1. The progression of 10^{th} ⇨ octave between the *bassus* and *contratenor* in the penultimate measure should be made *minor*.
2. The elimination of the melodic tritone in the *contratenor*, which, at least on a *first* reading, would otherwise have occurred between this B and the F of the final measure.

The fact that a B♭ in the *contratenor* here would create a direct harmonic tritone with the tenor E is outweighed by the three considerations already mentioned, as well as by the fact that this type of progression was routinely accepted at cadences.[63]

There remains one further alteration to be considered here, namely the *tierce de Picardie* ending.[64] The introduction of the *major* third at final cadences will be the subject of detailed examination in the next part of this chapter. Accepting this for the moment, therefore, I do not believe altering the final F to F# in any way undermines the validity of point 2 above, as the solmisation of these final few notes would still be entirely logical in the soft hexachord, and would not have effected the final alteration of what would have been *ut*, to *mi*.

All of this is consistent with linear operations in the *discantus* and *contratenor* parts. Even without the harmonic aspects described above I believe both of these lines would probably have been altered as a natural consequence of how each would feel to the singer. That this reading is entirely consistent with harmonic considerations is merely further verification of its validity. The afore-mentioned augmented and diminished intervals created here are therefore seen as fleeting harmonic consequences of which I am sure the singers would never even have been aware, and thus of no import.

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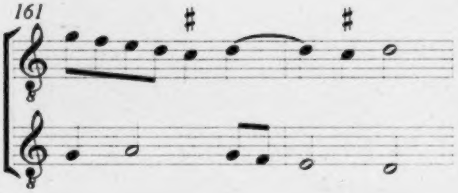
[63] See the previous discussion of this issue in Chapter 4(i).

[64] This term had its origin well after the period in question, however, as it succinctly describes the practice of raising the third at final cadences I will argue to be applicable here, the term will be retained. See part (iv) of this chapter to follow.

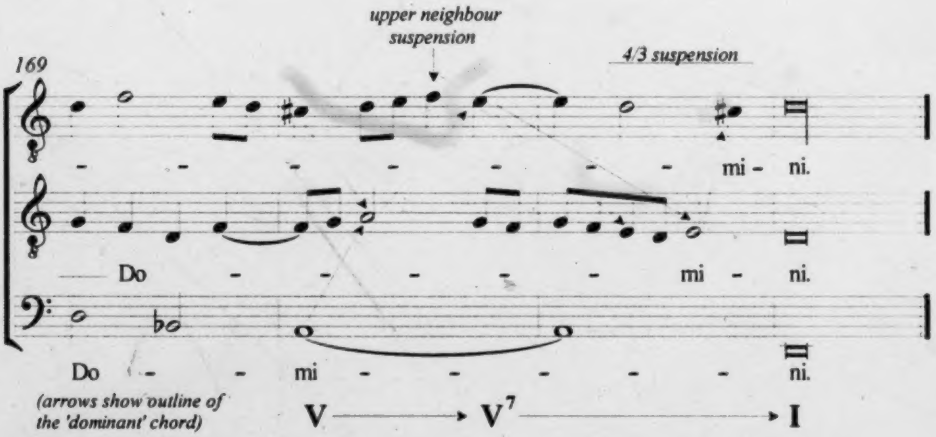
Another different style of leading tone progression involves a suspension in which the top note (the ultimately dissonant note) is approached from below. Once again I believe the singer, recognising a familiar cadential outline approaching, would inevitably raise *both* steps below the final 'tonic,' as the first one 'looks' just as much like a cadence as the second:

Example 30: Sanctus



Another less obvious example occurs later in the same section, in which I believe the anticipatory raised leading tone is justified as the approach to the cadence is so clearly indicated by the large-scale harmonic structure of the passage.[65]

Example 31

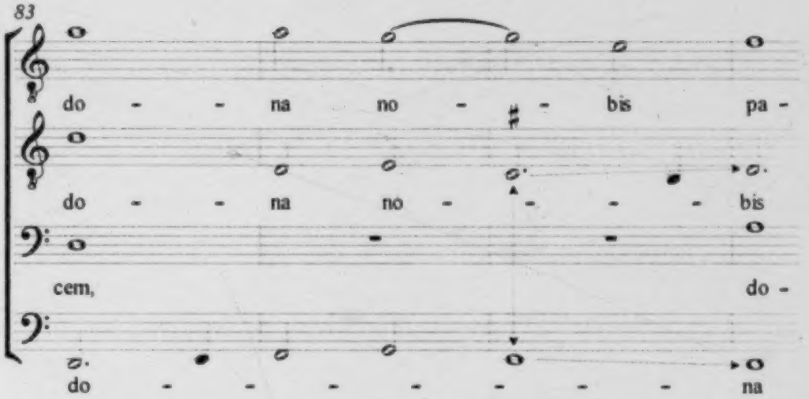

upper neighbour suspension
4/3 suspension
169
mi - ni.
Do
mi - ni.
Do - - mi - - - - - - ni.
(arrows show outline of the 'dominant' chord)
V
V7
I

---

[65] I am not suggesting here that the singers would have analysed this structure, rather, that they would have automatically reacted to its aurally perceived function. The modern chordal nomenclature used here is not inappropriate, I feel, despite the fact that Renaissance musicians would not and did not think in such termm. This is symptomatic of the much larger issue of the rise of functional tonality, which I believe had its most fundamental roots in the music of this period. For further discussion on this matter see Don Randel, "Emerging Triadic Tonality in the Fifteenth Century." The Musical Quarterly LVII (1971): 73-86.

One further important class of ornamental leading tone progression remains to be discussed: progressions which feature a non-essential harmonic passing-tone between the leading tone and the resolution.[66] In such instances I believe the leading tone should still be raised. Consider the following, from the *Agnus Dei III,* for example:

Example 32



As can be readily appreciated, the overall impression of both the harmonic and melodic progression of the *contratenor* and *bassus* is not affected by the passing B at the end of measure 85. The preceding written C should therefore be raised in accordance with both the sub-semitone convention as well as *causa pulchritudinis* with the *bassus.*

(iv) *Tierce de Picardie*

As mentioned earlier, despite the origins of this term significantly post-dating the period in question, its succinct description of practices I will argue to be applicable here justify its retention for the sake of convenience.

Routley has suggested that when "in the middle of the 15th century, composers began to add a third to the fifth or octave with which sections or whole works customarily ended, the *tierce de Picardie* (sharpened 3rd) was always used where possible."[67] This is a position which is substantially supported by a variety of different treatises. In his 1529 *Toscanello in musica,* Aaron's comments, while encouraging the composer to mark his intention clearly, are tantamount to an assertion that the practice was so widespread that it was more often than not left unsigned, assuming the alteration would be made by the performers:

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[66] Often described as a 'Landini cadence', after Italian *trecento* composer Francesco Landini. The construction is common in fourteenth through sixteenth century music.

> Thus it is necessary to show the sign of the diesis . . . so that the minor tenth with the contrabass, which is somewhat dissonant . . . . [when] raised to its place will sound smoother. Although this sign is little used by learned and experienced singers but given perhaps only for the inexperienced, unintelligent singer, a proper performance would not be given to this position or syllable without it.[68]

Santa Maria (1565) is equally unequivocal:

> Sometimes it happens that works finish on a tenth or its compound, that is, a seventeenth: whenever either of these two consonances is struck above D, or E, or A, or from any of their octaves, the treble is necessary to finish on a black sharp key.[69]

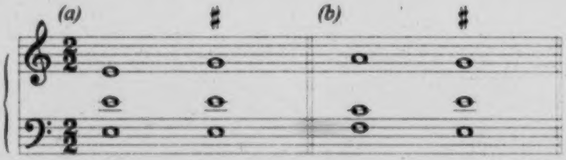
In case this were to be seen to be favouring instrumental practice over strictly vocal conventions, Bermudo (1555) is even more specific, while also bringing the time frame back still further, by referring to Ornithoparchus' 1517 treatise:

> let us say with Andrea, that if we may begin on an imperfect consonance, we may end on it, especially if it is a major third, which has great perfection through use, and there is scarcely a cadence in four voices in which one of them does not have a major tenth.[70]

---

[67] Routley, 67

[68] Aaron, vol. 2, 33-34. The example Aaron refers to here is (a) of the following. He also suggests the similar progression (b) should also raise the final third, saying "the diesis is also necessary in the following descent: . . . "



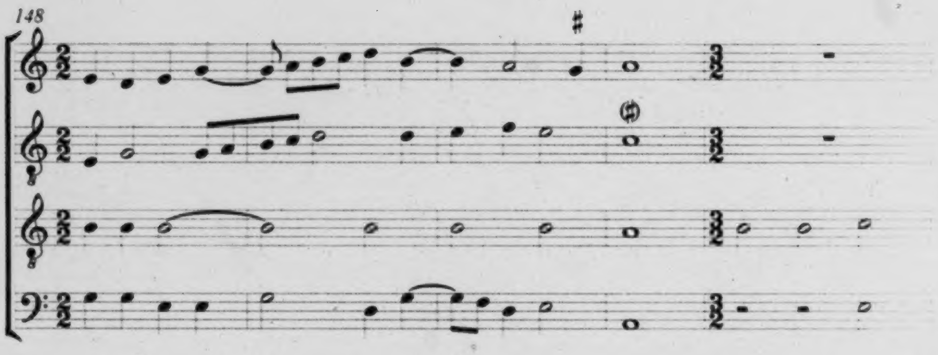
[69] Santa Maria, quoted in Charles Jacobs, "Spanish Renaissance Discussion of *Musica Ficta*." Proceedings of the American Philosophical Society vol. 112 (1968), 280.

[70] Bermudo/Bushnell, 108.

A number of modern commentators have relied at least in part on the evidence of intabulations in this area, evidence which tends to be contradictory. Toft, for example, notes that “intabulations of Josquin’s motets do not substantiate these claims [that the *tierce de Picardie* would routinely be applied at final cadences],”[71] whereas Routley on the other hand directly contradicts this, drawing on evidence from two sixteenth century intabulations of Josquin’s *Pater Noster* to support his conclusion that “intermediate *tierces de Picardie* are optional, but at final cadences they are obligatory, unless made impossible by the part-writing.”[72]

The sort of intermediate cadence at which Routley sees the *tierce de Picardie* as optional are of the type which follows in Example 33, from the *Credo* of the *Missa sub tuum praesidium,* in which the obvious structural significance of the cadence in measure 151 clearly presents the possibility of raising the *contratenor* C to C#.[73]

Example 33



There is only one instance of an intermediate cadence suggesting a possible *tierce de Picardie* construction in the *Missa l’homme armé I,* and this will be dealt with in the final chapter of this thesis. I am not particularly concerned, therefore, with discussing just how widespread this particular application of the *tierce de Picardie* convention may have been.

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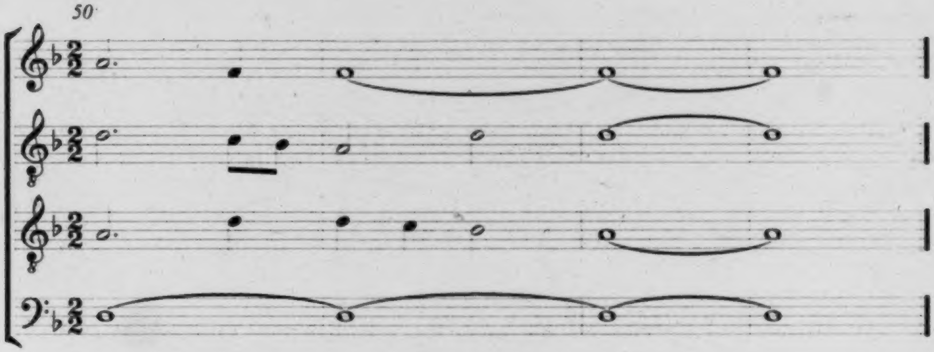
[71] Toft, 153.

[72] Routley, 67.

[73] This is an alteration I personally would make.

Rather, it is the *last* part of Routley's point which I believe to be most instructive here; that which pertains to the manner in which composers may have manipulated the part writing to prevent the possible application of such an alteration on the part of singers. Let us examine a number of such cadences in other works of la Rue.

Example 34



In this example from the *Kyrie* of the *Missa sine nomine*, the *tierce de Picardie* ending is clearly made impossible by the part-writing, as to introduce F# in the *discantus* in the second measure would then require the exceptionally unlikely consecutive alterations of C# and B♮ in the *tenor*.

In the following example, from *Kyrie* of the *Missa tous les regrets*, a similar ornamentation of the cadence again precludes the possibility of C# in the *discantus*:[74]

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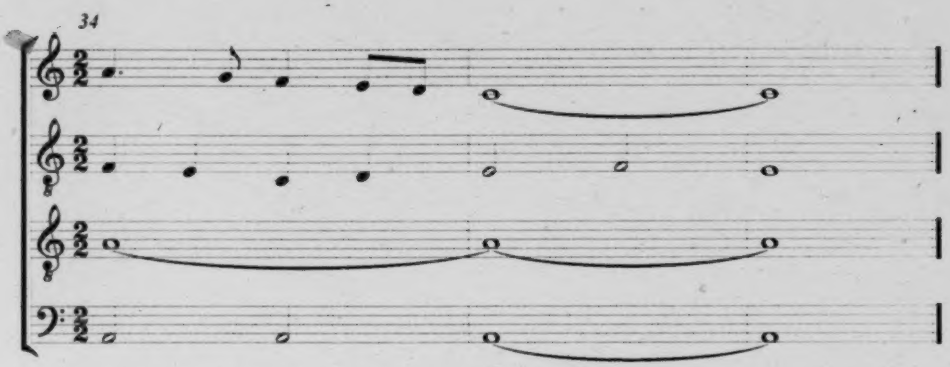
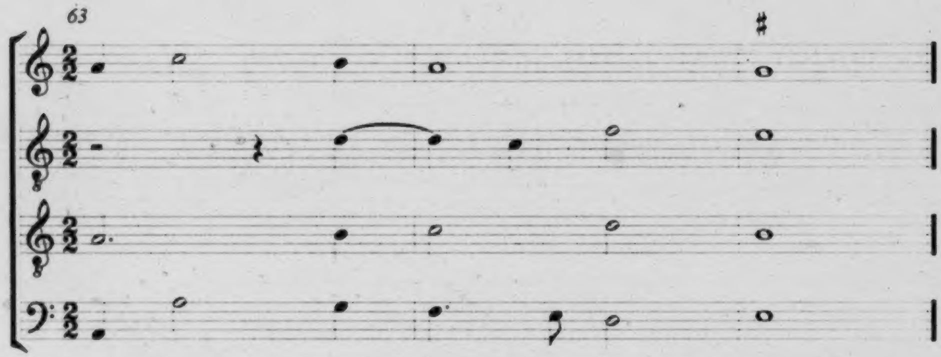
[74] The only way the C# could work would be to have F# in the *contratenor* in the penultimate measure, but, as we have already mentioned, this would then create a *major* sixth to fifth progression with both bass and tenor, where the *minor* sixth is required for *causa pulchritudinis*.

Example 35



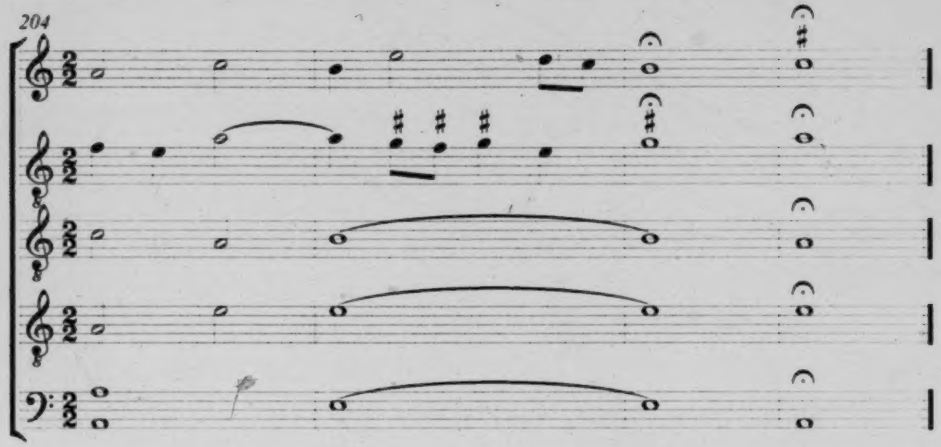
In contrast, the cadence at the end of the *Christe* of the same work presents no such impediment to the major third on the final chord:

Example 36



A more complex example of a cadence which supports the addition of the major chord on the final resolution is the magnificent ending of the *Credo* of the *Missa Ave Maria,* in which the additional *ficta* associated with the complementary application of the leading-tone cadence as well as *causa pulchritudinis* (with the *contratenor* and both *tenor I* and *bassus)* produce a strikingly impressive close:

Example 37



The final cadences above represent a reasonably representative sampling of the styles of cadence la Rue employs in his Mass settings. I have undertaken a brief statistical sampling of all the final cadences occurring in the six volumes of la Rue's Masses in the new edition, and the results of this survey prove to be quite revealing with regard to our current topic.[75]

Table 1

Make-up of Last Chord at Final Cadences

No third	**168**	**45%**
Diatonic Major Third	**75**	**20%**
Tierce de Picardie	**80**	**21%**
Major Third Avoided	**51**	**14%**

In the above, the category 'Diatonic Major Third' refers to passages in which the modal identity of the work leads to final chords in which the major third appears consistent with that identity; cadences, therefore, in which the inclusion of the major third requires no chromatic alteration.[76] The category 'Major Third Avoided' refers to passages in which I contend the composer has manipulated the part writing in such a way as to make the *minor* third at the final chord obligatory.

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[75] No cadences in any of la Rue's works that I have seen actually indicate the *ficta* addition of the *tierce de Picardie* at any time. This survey assumes la Rue was acutely aware of the practice of singers making chromatic alteration at final cadences (for the purposes of this exercise I will not include intermediate cadences, as what actually constitutes such a cadence is a matter of opinion). Final cadences in two-part writing have been excluded from this summary, as invariably these rest on either the octave or a unison. Most cadences in three-part writing also do not utilise the third, however, there are occasions on which they do, so all such examples have been included.

If indeed the situation is as I contend, namely that singers would automatically have inflected the harmony at final cadences if at all possible, it is now of great interest to look at the examples of when la Rue has managed the arrival at the final chord, in order to determine what might have been the motivation for doing so. While it is not the purpose of this thesis to classify the specific contrapuntal techniques employed in these progressions, it is interesting for our purposes here to note that, at least in this regard, all these final cadences are basically of two types:

1. Progressions which proceed directly to the final chord: *direct* cadences.
2. Progressions in which one or occasionally two parts indulge in some form of ornamental movement after the final harmony is established: *extended* cadences.

In some cases, where the final chord is not simultaneously arrived at in all parts, the two-fold categorisation above is somewhat a matter of judgement. In general I have considered the sort of 'extension' to a cadence in which an already sounding note is simply reiterated, or where a part simply moves to another note of the chord, as belonging to category 1. In most cases at least two of the parts (almost always including the bass) will have reached their final pitches before motion in other parts ceases for a cadence to be considered 'extended'. In the light of this, it is interesting to observe that of the 374 cadences summarised above, roughly 70[77] can be classifiable as 'extended', and of these some 72% (roughly 50) are of such a construction that the third could not be interpreted as major. The full results of this analysis appear below:

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[76] It must be noted that in approximately 20% of cases of the first category - in which no third is used – this also includes cadences in which, were a third to be added, it would be of the second category.

[77] As I have said, some are a matter of judgement, and this figure could vary by ± 10% or so, depending on opinion in some borderline cases.

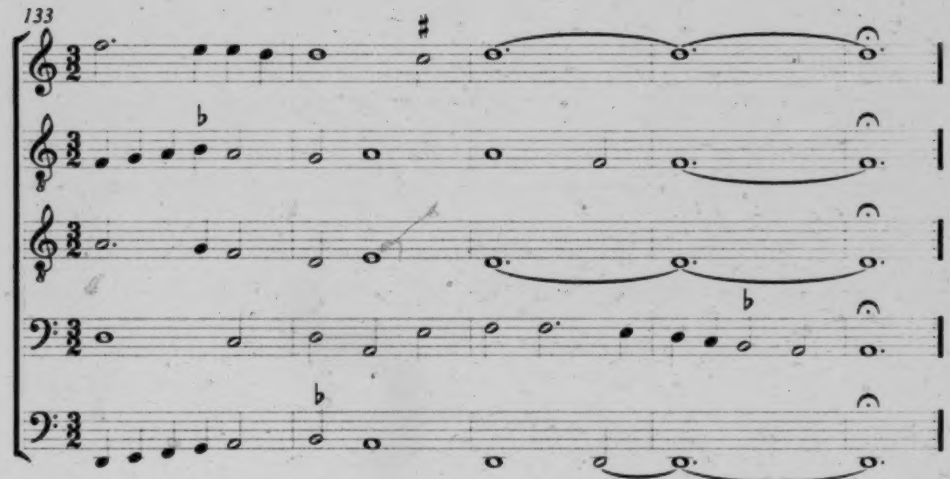
Table 2

	Extended Cadences	
Avoiding major 3rd	**50**	**72%**
Allowing major 3rd	**10**	**14%**
Inconclusive	**5**	**7%**
Not involving 3rd	**5**	**7%**

The weight of evidence supporting the contention that la Rue not only expected singers to inflect the third at final cadences, but felt it unnecessary to notate this alteration - preferring rather to manipulate the part-writing when he desired to exclude the practice - is now becoming quite persuasive.

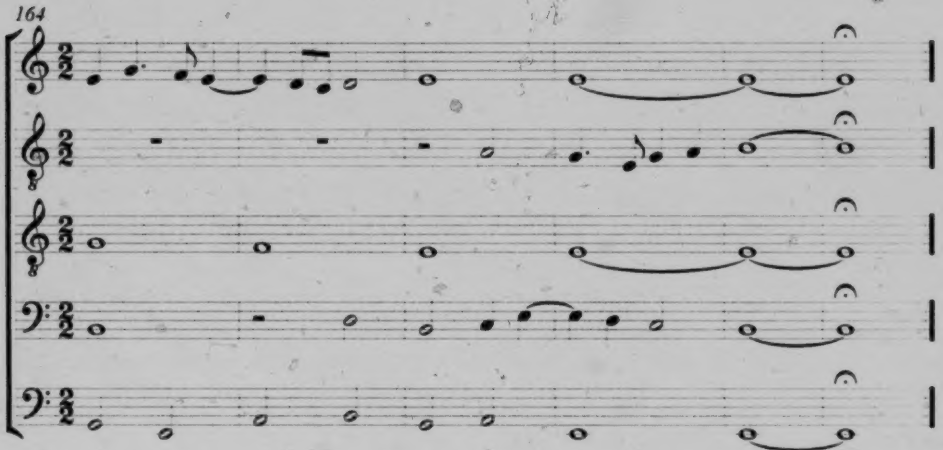
It is easy to imagine the composer's probable delight in devising myriad ways in which to achieve this end, such is the variety and range of invention shown here. Examples 38 and 39 are but two examples of these methods:

Example 38



In this example, from the *Gloria* of the *Missa conceptio tua,*[78] had the cadence been *direct* rather than *extended,* that is, if the final chord had arrived in conjunction with the terminal note of the *discantus, tenor,* and *bassus 2,* the *bassus I* would have been strongly tempted to take the F#. This is now made virtually impossible by the fact that this voice in particular now significantly extends the cadential structure, descending to the low A in a manner which renders the F# impossible at this point (i.e. a mutation into the *ficta* hexachord on D). Similarly, certainly considered in isolation as a purely melodic entity, the *contratenor* would also have been tempted to take F# in the third measure, an option which, in rehearsal with the *bassus I* particularly, would have been immediately ruled out.

Example 39



In this example, from the *Gloria* of the *Missa ista est speciosa,* had the cadence terminated with the arrival of the *bassus 2* on the first of its final low E's, the *contratenor* would certainly have taken G# at the same point. Without the *bassus 1,* this possibility might just be tenable, allowing both G's to be sharpened. When the *bassus 1* is considered, however, this becomes obviously impossible, requiring a completely wrong-sounding C# in the approach to the final B for the lower part.[79] Clearly la Rue wanted a final minor chord here.

---

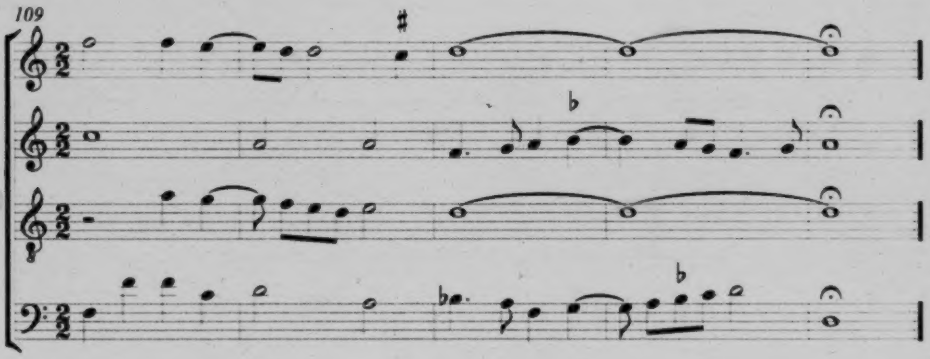
[78] The *ficta* B♭'s here are clearly indicated on a number of counts: *fa super la* in the natural hexachord on both the first two counts, as well as *causa pulchritudinis;* which applies in all cases. The C# leading-semitone is also supported by *causa pulchritudinis.*

There are innumerable further examples which could be brought to bear, but I would rather now briefly concentrate on an interesting possible outcome of the conclusions I have drawn. If we accept, as I suggest is possible, that in over 70% of the cases in which la Rue uses this type of extended cadence, he may have been doing so to avoid a major chord ending, then grounds for examining such usage itself - as an indicator of possible chromatic alteration in particular cases - becomes quite fascinating.

Having examined many such passages, I believe this technique could potentially be a powerful tool in determining whether chromatic alteration, particularly the use of the *recta* B♭, should apply in specific contexts.

The following example, from the third *Agnus* of the *Missa O gloriosa Margaretha*, is a good transitional one with which to begin my explanation of what I mean here, as it contains a signed *recta* B♭ alteration,[80] but no signature.

Example 40



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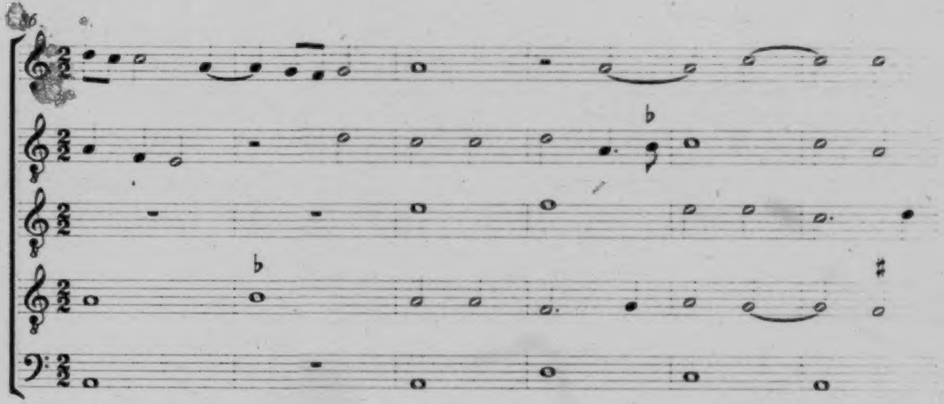
[79] As the C# would represent a contracting *major* 6th ⇨ 5th, rather than the more preferable *minor* variety; as shown in Example 26[d].

[80] As with most of the actually signed accidentals in la Rue's Masses, this is a fairly obvious *recta* B♭, which would have been corrected as a mater of course anyway, one suspects.

The signed B♭ of the *bassus* in measure 111 may well be a scribal addition to remind the singer of the danger of *mi contra fa* with the *contratenor,* whose F is therefore *not* intended for alteration.[81] All the B♭'s here are also clearly required by hexachordal choice. The part writing suggests that the F# would have been taken if the cadence had arrived where it might initially have been expected: measure 111.[82] The extension of the cadence clearly prevents any thought of the alteration remaining a viable alternative for the singers involved.

The next example, from the *Credo* of the *Misse de feria,* further illustrates the possible *ficta* ramifications of these extended cadences:

Example 41



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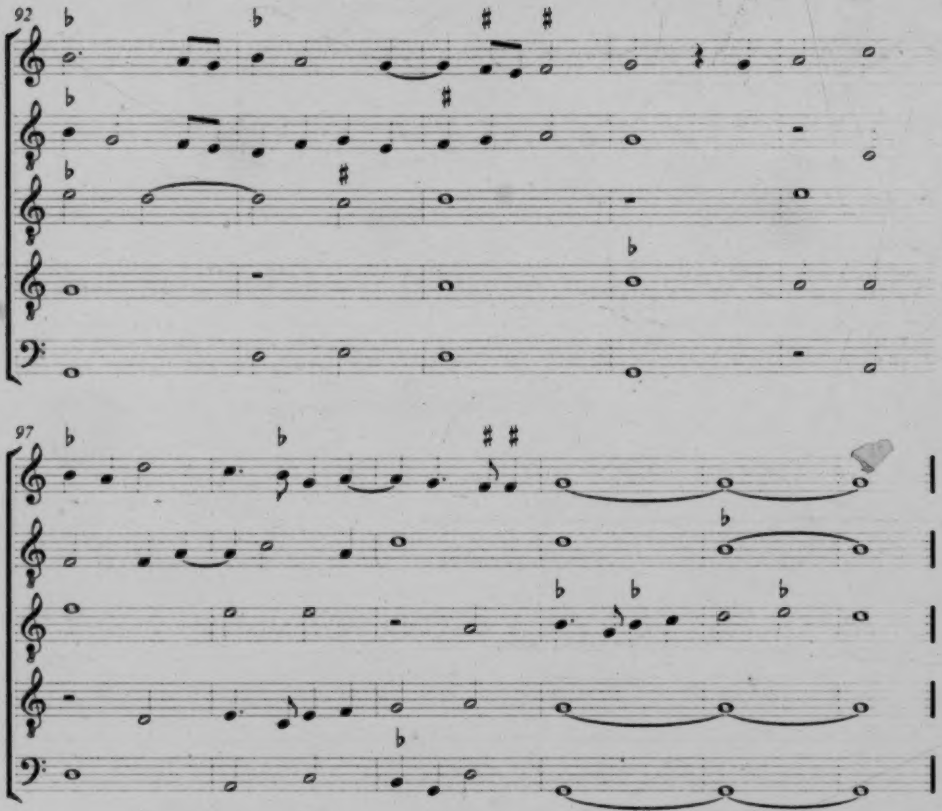
[81] It also warns of the danger of an approaching melodic tritone, but as similar passages in la Rue's music very rarely carry such a cautionary sign, the harmonic reason offered for the B♭ is perhaps more likely.

[82] Imagining the *bassus* would fall to the low D at this point as well.



Taking firstly just the last three measures in isolation, the *contratenor* here looks suspiciously like a *fa super la* extension above the soft hexachord, utilising the penultimate note as the chromatic upper neighbour of D. If this were the case, both B♭ and E♭ would be required, which would in turn require both B♭ in the *contratenor* in the penultimate measure to avoid the major ending. It must be remembered that even the E♭ in this instance does not truly represent a *ficta* alteration, as this note is allowed in this position in the soft hexachord without a mutation considered to have been effected.

It is unrealistic to presume that this alteration would come 'out-of-the-blue', however, so the previous, quite significant passage must also be considered to ascertain whether use of the soft hexachord is consistent. In order to do this, I have included the entire final section in the example. A number of aspects are immediately apparent:

1. The *tenor 2* from mm. 86 ⇨ 89 clearly requires the soft hexachord to avoid a glaring melodic tritone.[83]
2. Despite its passing nature, B♮ in the *contratenor* in m. 89 – against the sustained F in the *tenor 1* - would surely have been corrected by the singers, especially as the whole passage from m. 87 would then sit comfortably within the soft hexachord until a mutation into the adjacent natural hexachord in m. 92.
3. From mm. 89–93 the use of the soft hexachord for the *discantus* is consistent with point 2 above, the B♭ in m. 92 coinciding with the *contratenor* an octave lower, as well as therefore also being in keeping with point 4 following.
4. The E♭ in the *tenor I* in m. 92, required because of B♭ in the upper two parts, is entirely consistent with *fa super la* at this point, the mutation taking place in m. 91.[84]
5. The use of the soft hexachord in the *discantus* from m. 95 to the end seems logical, as B♭ is certainly required in m. 97 to avoid *mi contra fa* with the *contratenor*, and as the compass of this hexachord is not exceeded at any time, there is no reason for further mutation.[85]

The only difficulty with this reading involves the *tenor 1* from mm. 92–94, where my reading forces the part to progress by way of linear chromaticism. No doubt because of the difficulty of solmisation of passages such as this, this sort of progression would be unusual in this music. Routley has suggested, however, that in some cases – perhaps such as here – this kind of chromatic usage may have been allowed.[86]

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[83] This also has allows the distinctive rising semitone between mm. 88 and 89 in the *tenor 1* to be foreshadowed in the canonic guide. See also the following footnote.

[84] This E♭ thus renders the two canonic parts in different solmisations. I believe other factors in this instance override the possible benefits of exact canon here.

[85] The *ficta* to accommodate the leading tone cadence at the end does not change this

[86] Routley, 68.

Thus a reading of this entire passage could well be in keeping with one's initial impressions derived from the cadential structure at the end. I am not necessarily advocating this to be how it should be realised, hovever, but simply that it may well be worth considering the utilisation of what seems to be one of la Rue's stylistic traits in our exploration of possible alternatives to purely diatonic readings of his music, especially should such passages prove problematic from other viewpoints.

CHAPTER 5

Canon, *fuga*, and imitation

> By 1500 imitation had become a principal means of organizing and unifying a polyphonic texture. Instead of the long-phrased, linear designs of the Hayne-Ockeghem era, this new style is one of concise, motivic phrases and clear sections. Motives may be repeated, transposed, and varied, these repetitions going hand in hand with reiteration of words and phrases of text.[1]

For none was this more true than Pierre de la Rue; indeed the sheer variety of methods the composer devised to showcase his contrapuntal gifts is a defining feature of la Rue's style. For this reason it is necessary to look more closely at the two particular techniques which govern this imitative style: canon, as well as the less strictly applied technique I will simply refer to as 'imitation.'

In the period under discussion, 'canon' meant a rule for the derivation of parts,[2] rather than what the modern meaning of the term might suggest, and it seems all composers of this period were fascinated by the many procedures available for the writing of strict canon.[3] La Rue seems to have delighted in the intellectual discipline presented by writing canons, and to have particularly relished the writing of a variety of canon in which same solmisation is preserved throughout. No doubt he considered this to be a challenge to his resources and ingenuity.

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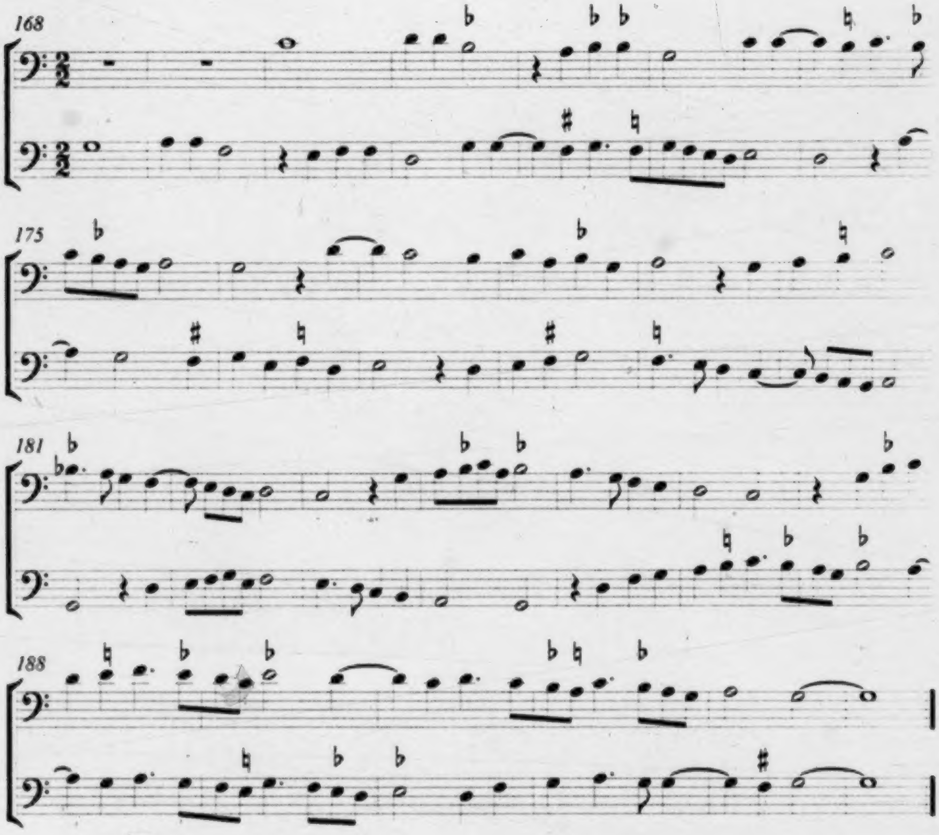
[1] Martin Picker, The Chanson Albums of Marguerite of Austria, (Berkeley and Los Angeles: University of California Press, 1965), 63.

[2] "A rule showing the purpose of a composer behind a certain obscurity." Johannes Tinctoris, Dictionary of Musical Terms (Terminorum Musicae Diffinitiorum), trans. Carl Parish (London: Free Press of Glencoe, 1963), 13.

[3] Bartolemeo Ramis de Pereia, for example, gives many examples of the various ingenious methods composers such as Dufay, Busnois – as well as his learned self – devised, often with "secret words", to communicate how other parts should be derived from a single original: Bartolemeo Ramis de Pereia, Musica Practica. Musicological Studies & Documents 44, trans. Clement A. Miller (Neuhausen-Stuttgart: American Institute of Musicology Hänssler-Verlag, 1993), 153–157.

The fact that so many of la Rue's truly canonic sections *are* realisable in strictly identical solmisation seems to prove this. Consider the following for example, from the *Benedictus* of the *Missa Incessament:*

Example 42



This is a canon at the fourth and as such should be considered a candidate for same solmisation. I have retained the intervallic relationship exactly until the approach to the final cadence, in which same solmisation would lead to a suprasemitone cadence on G, with A♭ in the first *bassus I,* and F♮ in the *bassus 2.* As many canons of this period became slightly modified at the very end, I believe the leading tone alternative appearing above is superior.

Particularly fascinating in the above example is the fact that time and again chromatic alterations made in the first voice make perfect contrapuntal and harmonic sense when they reappear in the second voice transposed up a fourth. As the same is true in example after example of this type in la Rue's output, this can hardly be considered accidental, and thus the weight of evidence leads inevitably to the conclusion that la Rue intended same solmisation as a general principle in canonic sections such as these. The fact that la Rue's singers would have read this music from just one part makes it imperative for us - when transferring the music into modern scored notation - to now supply the chromatic alterations necessary for the canon to be realised correctly.

Apart from strict canon, la Rue's music consistently revolves around various methods of imitative writing, techniques finally and most succinctly categorised by Zarlino in the middle of the 16th century:

Fuga:	. . . the parts sing one after another . . . after an interval of time. The second part sings the same note values or different ones, and the same intervals of whole tones and semitones, or similar ones. . . . One voice may answer – or better said – follow another at the unison, . . . or at the fourth, or at the fifth or octave.[4]
Imitation:	In imitation the consequent need not retain the intervals of the guide. . . . like fugue [it] may be at the unison, fourth, fifth, octave, or other interval, that is it may be written also at the second, third, sixth, seventh and similar intervals.[5]

Zarlino's description of *fuga* may at first glance seem somewhat loosely constructed, but its flexibility arises from an attempt to describe two related but distinct techniques, one of 'strict' *fuga*, the other 'free.' He then goes on to clarify this distinction:

Strict *fuga:*	the melody of one voice is exactly duplicated in another; for this reason composers will frequently write out the melody in one of the parts only. . . . note values and rests . . . . must be duplicated . . . [6]
Free *fuga:*	The imitating voice duplicates the other in fugue or consequence up to a point; beyond that it is free to proceed independently. Moreover the composer is not bound here to reproduce note values or rests exactly,[7]

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[4] Ibid., 126

[5] Ibid., 135

[6] Ibid., 127

[7] Ibid.

Similarly, imitation can also be described as either 'strict' or 'free':

Strict imitation:	the consequent follows the guide with respect to the movements or steps but not with the same intervals[8]
Free imitation:	the consequent may develop . . . . partly through imitation and partly in consequence [fugue], partly in similar motion, and partly in contrary motion. It would take too long to discuss all these small particulars.[9]

Such clear definitions of imitation and *fuga* are not to be found in the work of earlier theorists. This arouses the suspicion that, in the period in which we are interested, the two concepts were considered roughly synonymous, with lesser importance being attached to the actual difference between varieties of 'imitation.' This is an impression supported by the following from Aaron in 1516:

> Imitation or fugue between parts is customarily practiced in musical compositions. It is called imitation or fugue because the consequent . . . voice repeats the very notes of the preceding part or else repeats notes identical in name though different in location.[10]

For Aaron (1516) at this stage,[11] the two terms both mean the same thing: what Zarlino would call strict *fuga.*[12] This does not mean that the concept of 'imitation' as Zarlino defined it above was not a feature of the music of the late fifteenth and early sixteenth century; the technique abounds in great profusion in this repertory, as even cursory examination shows. Perhaps this seeming inconsistency is further evidence that the theoretical realm lagged behind practice. As Picker observed above, the imitative method was relatively new around 1500, and it would therefore not have been surprising if the theory and terminology describing practices well entrenched by this time only become more systematically codified in the middle third of the century just commencing.

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[8] Ibid., 135

[9] Ibid.

[10] Pietro Aaron, De institutione harmonica, (Bologna, 1516), quoted in James Haar, "Zarlino's Definition of Fugue and Imitation." Journal of the American Musicological Society xxiv (1971), 232. The description here fits basically the definition of fugue as supplied by Tinctoris, Dictionary, 33.

[11] Haar has shown that Aaron's conception of the terms changed later in his life. See Haar, 232-3.

[12] Although Aaron's definition does not name the interval of imitation (other than the unison/octave) it is reasonable to assume the 'different locations' were the fifth and fourth, as these are the only other intervals at which notes "identical in name" could consistently be placed.

For the period in which la Rue was composing, it therefore seems that we can use Zarlino's term *fuga* in the strict sense to describe canon, as well as - in a more limited sense - imitative passages at the unison, octave, fourth and fifth which feature same solmisation. The term 'imitation' could encompass the same process,[13] but as it also covers Zarlino's three other categories - that is, it could describe strict diatonic imitation at intervals other than those mentioned above (Zarlino's 'strict' imitation); *fuga* which did not remain strict for an entire passage (Zarlino's 'free' *fuga);* or imitation which retained the general outline of the derivative voice, including extemporisations such as inversion and rhythmic variation.

One aspect which I believe has bearing on this issue stems from the very nature of the compositional material itself. Routley's example of the head motive formed from the opening pitches of the *Pange lingua* chant in Josquin's Mass of the same name is an excellent case in point, and I am sure he is correct in suggesting that all parts should be realised in the same way.[14] Surely singers so closely acquainted with one of the most widely utilised chant sources of the period would automatically have retained its phrygian fingerprint as a matter of course; a solution given all the more credence by the fact that the *causa pulchritudinis* sixth ⇨ octave progression involved on both occasions (mm. 3 ⇨ 4 and 6 ⇨ 7) is thereby also satisfied in the only possible way (see marked portions of Example 43 following):[15]

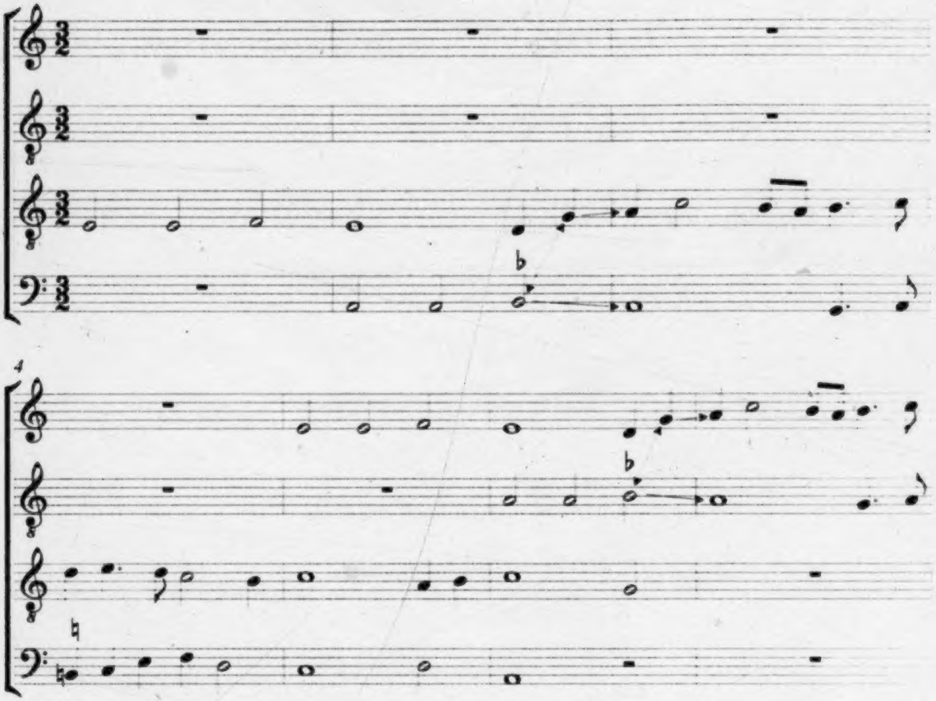
---

[13] The set of possible fugues is therefore a subset of the set of possible imitations.

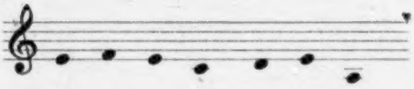
[14] See Routley, 67-8. Having sung this work myself, I simply cannot imagine not doing this. Even in listening to the recordings made by both the Tallis Scholars and Ensemble Organum/Clement Janequin Ensemble, I find the unaltered realisation of this head motive startlingly disconcerting.

[15] G# in measures 2 and 6 is obviously out of the question here.

Example 43 **- Josquin: *Missa Pange Lingua***

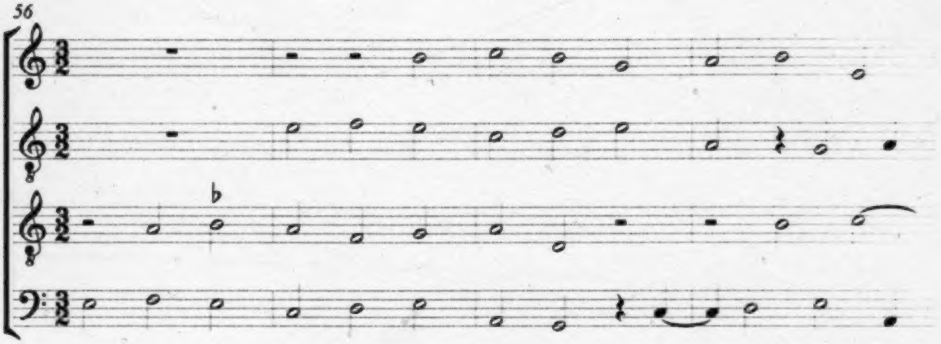


I believe there even exist occasions on which the demands of same solmisation implicit in this principle can override other conventions regarding vertical dissonance. In la Rue's *Missa Sancta Dei genitrix,* for example, the composer uses the following chant incipit consistently throughout the whole work as the basis for the imitative polyphony:



On every occasion except one in which this head motive is used imitatively, it appears at the unison, octave, fifth above, or fourth below - that is with a starting note of E or B - dictating that the passage therefore appears in same solmisation. The one exception is as follows:

Example 44



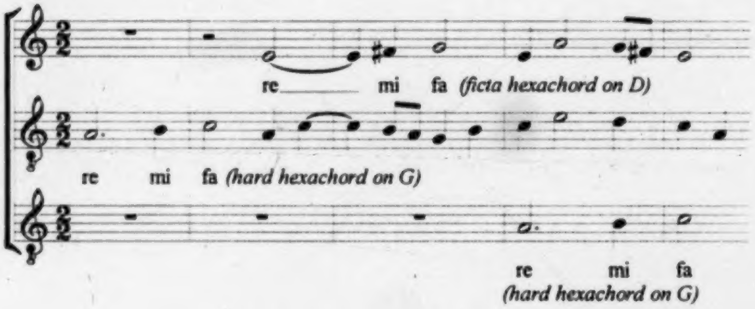
Clearly there are two possibilities for the *tenor* here, both of which create tritone usage which would normally have been avoided. In this instance, however, I believe the harmonic tritone would be allowed in order to preserve the integrity of the chant model. The alternative reading would represent the *only* time in the whole work that this head motive was rendered with a whole tone at the opening - surely a somewhat perverse act on the part of any singer. The fact that correcting this by way of a *recta* B♭ also avoids the melodic tritone in the second tenor part - thereby preserving same solmisation - is a bonus in this case.

Even more than with many of the previously discussed issues to do with the application of chromatic alterations in this music, there can be no hard and fast rules guiding our decision making process with regard to imitative passages. It seems reasonable to assume some such passages, whether conceived within the fully realised concept of *fuga* as described above, or of a more fleeting nature, were designed to be 'said' in the same way (i.e. intervallically identical), and some were not.

In practice, of course, strictly identical imitation was really only possible when the intervals of imitation were - in decreasing order of ease of application - the unison/octave, the fifth, or the fourth – as Zarlino has pointed out. The reasons for this revolve around the intervallic structure of the hexachord, that is, where the semitone falls in each case. The opening three notes of the preceding example, for instance, can only appear as *mi-fa-mi* in three places in *musica recta*: E-F-E, B-C-B, and A-B♭-A (in the natural, hard and soft hexachords respectively). In practice, imitation at any other interval than those mentioned above would require the invocation of a hexachord associated with *musica ficta,* and while this was not impossible, in most practical cases the continuing application of successively more remote hexachordal operations would have made the composition unworkable. Imagine, for example, trying to make a composition from this motive using same solmisation at intervals of progressive seconds.[16]

When the interval of imitation is one of those described above, however, I believe each case must be examined individually to determine whether exact intervallic repetition is required. The fact that this may well require the application of *musica ficta* should not of itself discourage this inquiry. This is a position which is strongly supported by Allaire's analysis of the hexachordal system, and applies in cases even where the entire passage used in imitation does not retain even the diatonic outline of the guide, as Example 45 shows:

Example 45 – (after Allaire)


re mi fa *(ficta hexachord on D)*
re mi fa *(hard hexachord on G)*
re mi fa
(hard hexachord on G)

In this case, the fifth note of the top part departs from the pattern established by the middle part, but Allaire still suggests same solmisation for the first section of the motive, requiring the use of *ficta* F#'s. In this instance I believe the decision is justified as the octave in measure 3 is then approached by way of an expanding major sixth, and the fifth between the parts just prior to this is maintained as perfect.[17]

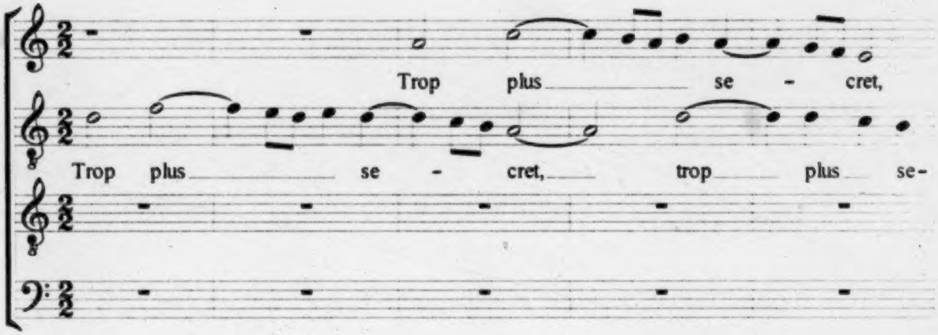
---

[16] In some instances a compound interval of a second – i.e. a major ninth – could possibly present an occasion on which same solmisation I feasible. In la Rue's motet *Pater de caelis,* for example, two canonic answers follow the guide at successive intervals of a fifth, making the third voice a major ninth above the first. The interval of imitation is so long, however, that there is rarely a case where these two voices clash when interpreted in exact canon. I believe, therefore it is possible la Rue intended this to be the case.

In this light, it seems reasonable that one should consider applying same solmisation to imitative passages which retain basically the same diatonic form if the interval of imitation is one of those mentioned. Each case requires particular consideration, however, as the individual character of the imitative material has a significant bearing on any decision.

In order to exemplify the extent to which this issue can alter our impression of the music, I will consider a particularly interesting passage in one of la Rue's secular works, the chanson *Trop plus secret.* Consider the opening:

Example 46



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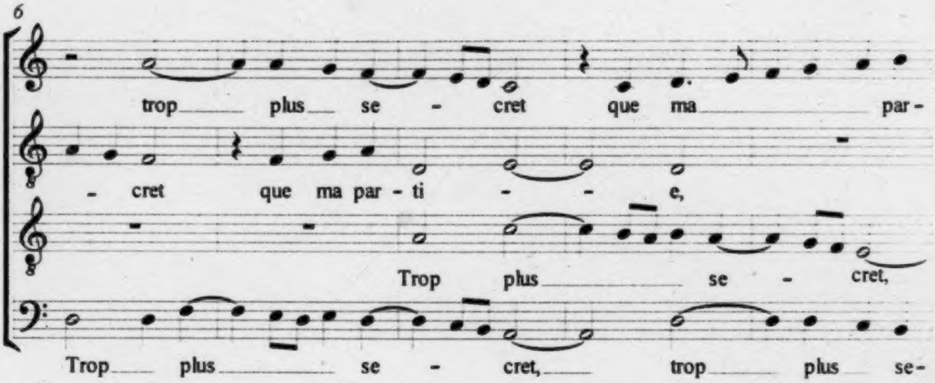
[17] See Allaire, Theory of Hexachords, 76. Also relevant are pp. 121-2. In this instance the *recta* alternative of B♭'s in the first tenor part – the result of realising this part in the soft hexachord - becomes problematic in measure 4, where the E would also be expected to be flattened in accordance with *fa super la*, creating a tritone with the alto (whose part clearly cannot start on E♭). A tritone E♮ in measure 4 so soon after the B♭ in measure 3 sounds very awkward. In this instance the F#'s seem a more likely solution.


6
trop plus se - cret que ma par -
- cret que ma par - ti - - e,
Trop plus se - cret,
Trop plus se - cret, trop plus se-

I believe there are a number of problems with this 'straight' version which make it conceivable singers at the time, also realising a difficulty with the music, would have tried to correct.[18] These problems arise from the way in which the imitative parts are resolved and the resulting counterpoint. In looking at this music the following points need to be considered:

1. The motive is used in what seems to be strict imitation for nearly two full phrases in each part, at the interval of a fifth.
2. If considered as written, the guide and the consequent require different solmisations.
3. The *major* sixth ⇨ fifth suspension that occurs in measure 4 calls for alteration.
4. There is strong melodic tritone incorporated into the second phrase of the *contratenor* (B ⇨ F from mm. 5-6) which sounds very unconvincing, and suggests probable mutation into the soft hexachord.

Considering the first two points above, the fact that this motive appears at the interval of a fifth, the second easiest interval at which true *fuga* is possible, and also considering it is so close to true *fuga* already, it seems at least possible that the composer intended the parts to 'said' in the same way.

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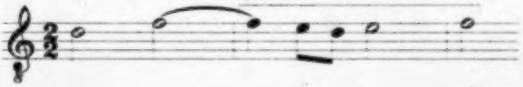
[18] Or would have been aided in so doing by the composer.

The suspicion thus aroused also suggests that the third and fourth points above may also be resolved if a satisfactory alternative were found to be possible. Let us explore this possibility.

Point 3 above suggests B♭ in at least the *second* half of measure 4 would be better than B♮. This in turn would require E♭ in the guide in at least the second half of measure 2, which immediately has appeal for both lines, as singing the individual parts from this point onwards looks and feels like a *fa super la* construction.

If this is to be the case, however, what of the first one and a half measure? Taken in isolation, on first reading, this melodic line might well have reminded singers of the ornamentation of a returning note figure, as follows:

Example 47a



When the progression did not continue to the final F, however, the fact that the passage was not of this variety would have been obvious, and the singer would therefore have been faced with the question of where to make the mutation in preparation for the line's descent below the range of the natural hexachord. Two choices would have presented themselves:

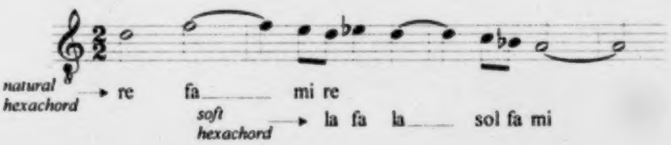
1. To mutate into the hard hexachord to accommodate measure 3.[19]
2. To mutate into the soft hexachord, which would accommodate the whole passage up until the end of measure 6.

As the second possibility presents a more economical solution, I suggest this is perhaps the more likely version. If so, it then follows that the mutation be triggered at the point at which the melodic configuration aurally reveals itself as differing from that which the listener might have expected; that is at the first D *re la* in measure 2, especially as *re la* would have been recognised as a common pivot for downward mutation in other circumstances.[20] This does not change the approach which would have been adopted for the opening part of the phrase, it just means the link to the rest of that phrase is somewhat unusual. With the aid of the afore-mentioned apparent *fa super la* in the second half of measure 2, this would result in a solmisation for the opening phrase as follows:[21]

---

[19] Some may argue that the opening could be solmised in the hard hexachord – with the addition of *fa super la*. While this is true, I am interested in the possibility of same solmisation of the imitative parts, and if this were true for the first part, it could not be true from the second entry in measure 3, which would have to be imagined in a *ficta* hexachord on D. This is clearly not intended here.

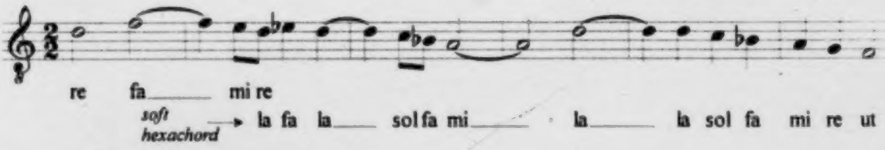
Example 47b



There is nothing here which would have been particularly problematic for the Renaissance singer. The cross-relation on E is close, but certainly singers would have encountered constructions of this variety before.[22] As previous discussion of the practicalities of *fa super la* has revealed, this solution arguably does not even involve *musica ficta,* as the B♭ is a *recta* alternative, as is the *fa super la* E♭ above this, the operation being carried out without a mutation having been considered to have been made.

As mentioned earlier, a further advantage of this interpretation thus allows *both* phrases to be solmised in the same hexachord after the initial mutation, as follows:

Example 47c



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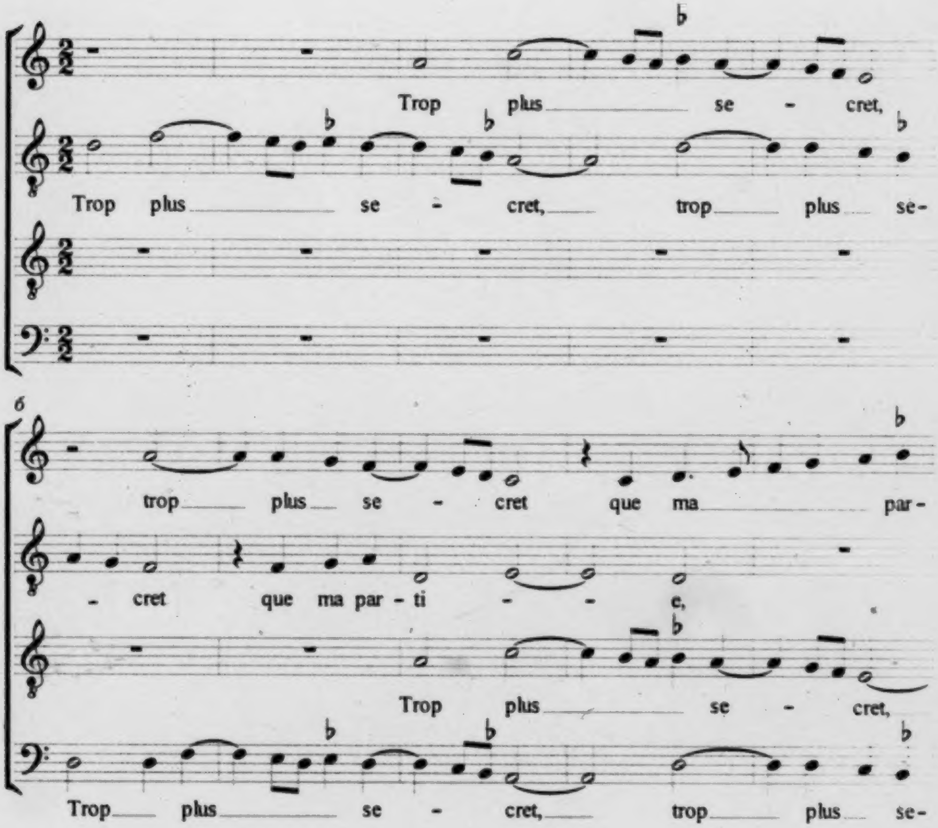
[20] See Examples 6f and 6g in Chapter 3.

[21] As I believe the solmisations I am setting out will be more clearly exemplified by doing so, I will momentarily dispense with the advisory accidentals here, as well as in part c of this example.

[22] See Chapter 9, on cross-relations.

What is the result of applying this solmisation to all parts in this opening section of the chanson? Not only do all four of the problems detailed above automatically disappear, but the recurring cross-relations immediately and powerfully identify with the 'secret' allusion in the text in a way which I find quite compelling.[23] Here is the whole passage as I believe it should sound:

Example 48



Trop plus se - cret,
Trop plus se - cret, trop plus se-
6
trop plus se - cret que ma par-
- cret que ma par - ti - - e,
Trop plus se - cret,
Trop plus se - cret, trop plus se-

---

[23] This form of direct word painting is still thought to be relatively rare at this stage, however there are a number of examples in music of this time which point to perhaps a wider use of this compositional tool than has been hitherto recognised. See the extremely powerful example provided by Josquin's motet *Praeter rerum seriem,* referred to previously; also my discussion of this issue in Chapters 9 and 10 which follow.

PART B

APPLICATIONS TO THE *MISSA L'HOMME ARMÉ* OF PIERRE DE LA RUE

CHAPTER 6

La Rue's use of the *l'homme armé* melody

The French chanson *L'homme armé* was the most popular melody employed by composers from the mid-fifteenth century onward as a basis for use in their Mass settings. The melody was used by all the major figures of the period, many of whom did so on more than one occasion. The reasons for this popularity no doubt stem from the mechanics of the melody's intervallic construction, which revolves around leaps of a perfect fourth, fifth, and octave, combined with step-wise movement within the first two of these compasses. The combination of these features renders the melody particularly susceptible to treatment of imitative, canonic and paraphrase varieties - in even the most complex of polyphony - without surrendering its particularly distinctive aural impact.

Both la Rue[1] and Josquin wrote two Masses based on this tune,[2] and Davison has suggested that la Rue's work is likely to have been at least in some way inspired by the first of Josquin's settings - the *Missa L'homme armé super voces musicales*. In support of this contention, Davison points to the 4 x mensuration canon in the second *Agnus* as possibly being an attempt on la Rue's part to emulate, even outdo, his more famous colleague, who wrote a 3 x canon at the same point.[3]

The pre-eminent feature of Josquin's Mass is not the (admittedly formidable) virtuosity of the use of any one compositional technique, but the fact that the original melody appears in successively ascending modal identities as *cantus firmus* in the six different 'movements' of the Mass.[4] There is no doubt that one of the reasons Josquin chose to do this was to 'show off' his compositional mastery, this being exactly the sort of intellectual exercise musicians of the period seemed to delight in.

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[1] As mentioned previously, the authenticity of la Rue's second setting has not been fully established.

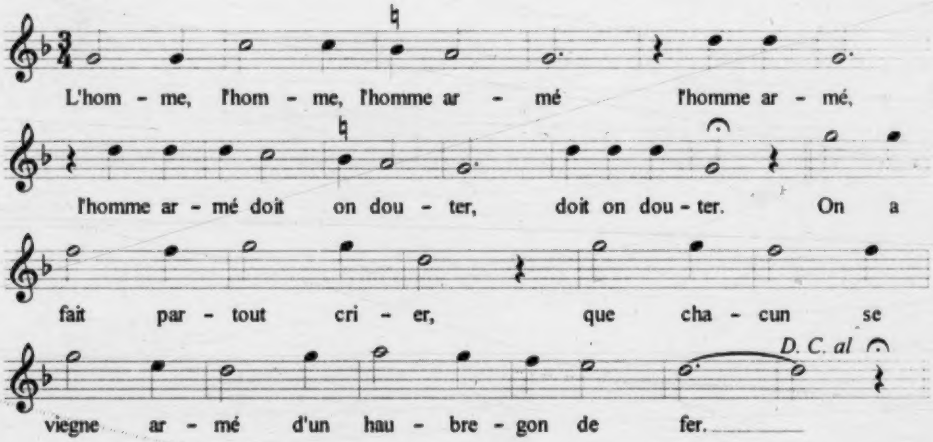
[2] Published in successive years by the same Venetian printer, Ottaviano Petrucci: Josquin's in 1502, la Rue's in 1503.

[3] See the preface to both Davison's editions: Nigel Davison, Missa L'Homme armé, (Wolfenbuttel : Moseler Verlag, 1972); Pierre de la Rue: Opera Omnia. Corpus Mensurabilis Musicae 97, vol. 4 (Stuttgart: American Institute of Musicology/Hänssler-Verlag, 1996).

I believe it is also possible that Josquin saw his differing modal colouring of the melody as being consistent with its variable interpretation in common usage. I believe this varied modal usage in Josquin's work finds a parallel in the use of the melody in la Rue's Mass, where it is fundamentally incorporated into the make-up of all parts, often to a bewildering degree.

In order to further investigate la Rue's treatment of this tune, let us look firstly at the melody itself, which is normally quoted in reference material as in Example 49, often with an advisory signature of 1 flat, defining the transposed dorian mode on G. I have incorporated this into the signature, with the possible mixolydian interpretation (the other often-quoted version) indicated by the ♮'s above:

Example 49


L'hom - me, l'hom - me, l'homme ar - mé l'homme ar - mé,
l'homme ar - mé doit on dou - ter, doit on dou - ter. On a
fait par - tout cri - er, que cha - cun se
viegne ar - mé d'un hau - bre - gon de fer.
D. C. al 𝄐

---

[4] Indeed, this is how the work gets its name.

Undoubtedly the melody as it appears above is one of the versions la Rue uses in the Mass, but I contend he, like Josquin, also used other modal identities in the work, identities which have the potential to alter the make-up of all the passages in which step-wise movement occurs. As will be explained in the chapters to follow, on numerous occasions in which I believe this to be the case, such modified modal identities are revealed only by the application of chromatic alteration.

The melody itself is of unknown origin, probably dating from sometime in the first part of the fifteenth century; as Cohen has observed, it is "difficult to determine the original version of the *L'Homme armé* song, as composers have used the melody in many different variations and modes."[5]

It is this aspect of flexibility of modal identity which I would particularly like to explore. Especially interesting are the examples by Compère (*c.*1450–1518) and Obrecht (1450/51–1505),[6] as both exploit the melody in the phrygian mode as *cantus firmus*. Further, the distinctive placement of the semitone implied by the phrygian interpretation of the melody is sometimes allowed wider influence, resulting in the modal inflection of individual lines to interesting effect.

In the following example from the *Osanna* of Compère's *Missa L'homme armé,*[7] the final phrase of the melody appears in diatonic canon at the ninth in the *bassus* and *tenor*, and the composer's manipulation of this canon results in strong melodic tritones in both parts. These are of different varieties, however, with the tenor tritone accommodated within the parameters of a *fa super la* extension above the hard hexachord: F *fa* (m. 67) to B *mi* (m. 71), while the signed B♭ in the *bassus* in measure 69 creates an augmented fourth with the previous E in measure 66 (marked by ✱ in the following):

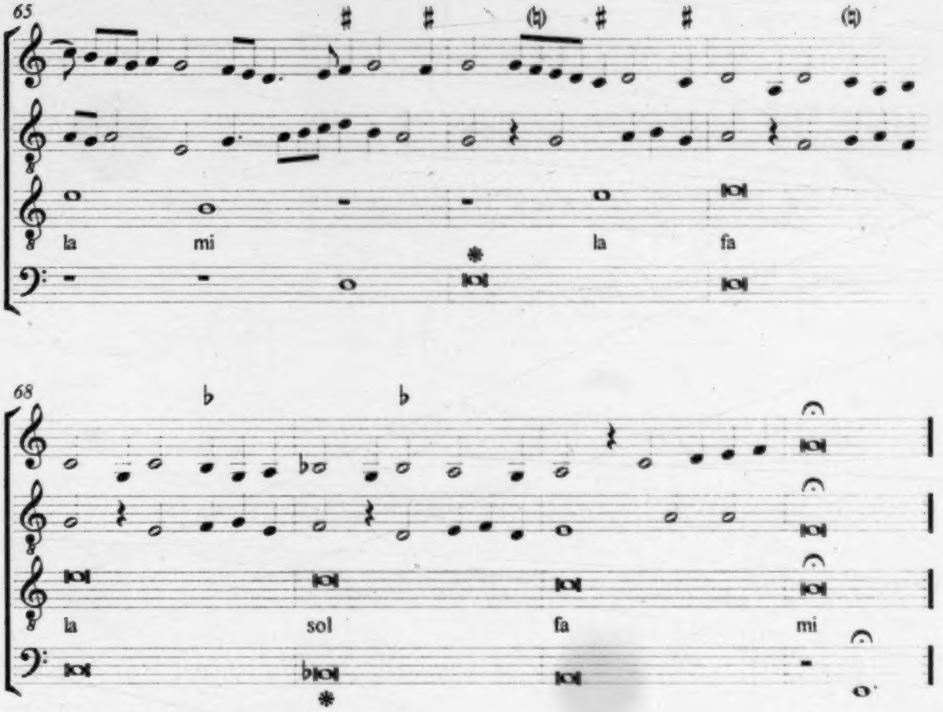
---

[5] Judith Cohen, The Six Anonymous *L'homme armé* Masses, Musicological Studies and Documents 21 (American Institute of Musicology, 1968), 22.

[6] At least two other L'Homme armé Masses, both slightly later, also place the tenor *cantus firmus* in the phrygian mode; those by Morales and Senfl. See Cohan, 48-49.

[7] One of the composer's early Mass settings.

Example 50 - Compère: Missa L'homme armé



In the *Kyrie* and *Gloria* of Obrecht's Mass, which also almost certainly pre-date la Rue's,[8] the *cantus firmus* tenor holds the melody quite straightforwardly in the phrygian mode on E, replete with the frequent use of the melodic tritone which that implies. In the *Credo,* however, the *cantus firmus* shifts to be based on A. The mode is still phrygian (now transposed), however, as consistently a *recta* B♭ is indicated, as follows:[9]

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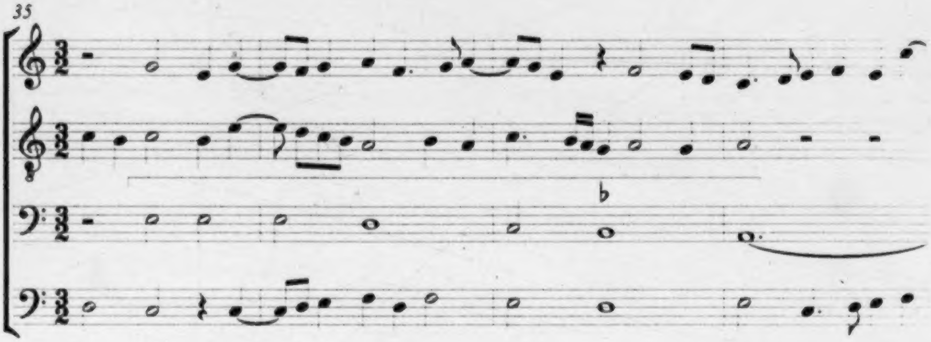
[8] Oliver Strunk, "Origins of the *L'homme armé* Mass", Bulletin of the American Musicological Society II (1937), 25-26. Strunk places the composition of this work around 1490.

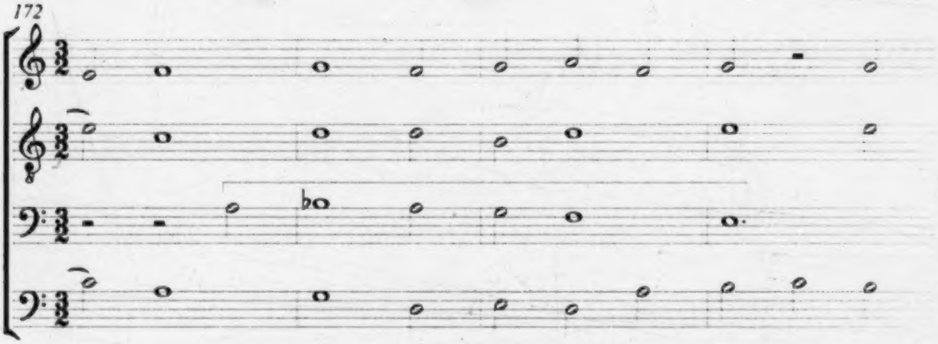
[9] The B♭ is clearly indicated to avoid *mi contra fa* with the *discantus,* as well as being consistent – in this example – with a suprasemitone cadence in counterpoint with the *contratenor.*

Example 51 – Jacob Obrecht: Missa L'homme armé



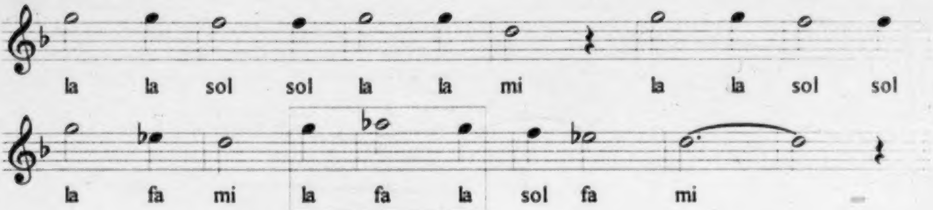
Later on in the same movement, the phrase of the melody which we will see corresponding to Example 54/3b(iii) below, actually shows a signed B♭ as a *fa super la* extension above the natural hexachord. Again, the melodic tritone thereby created within the phrase is quite striking:

Example 52 – Jacob Obrecht: Missa L'homme armé



If, for the sake of reference, we translate the implications of Obrecht's usage of the melody here into the context of Example 52 – with a signature of 1 flat – the solmisation of the second half of the melody results in this version:

Example 53



fa super la performed without mutation

This is the same as the *tenor* in the Compère example above. If the *bassus* of that example is placed within this context, however, A♮ would be required for the second note of the boxed portion, thereby demanding a different solmisation, now with a mutation into the hard hexachord.[10]

I believe the former in particular[11] can be demonstrated to be a version la Rue uses on a number of occasions in the Mass. Whether or not there was any direct influence on la Rue from either Compère or Obrecht, both were composers with whom he was very likely to have been familiar, and one imagines he may well have been aware of these particular works.[12]

This is one example of how the 'aural signature' of the melody can be altered by the ingenuity of the composer. Davison has noted that in *Agnus I,* the melody is "simultaneously paraphrased in the dorian, phrygian and lydian modes."[13] Indeed I believe this sort of mixed-modal usage pervades not just this section, but much of the piece, as will be shown below.[14]

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[10] As the hard hexachord is the next adjacent hexachord above the soft I believe this is a more likely choice than the natural hexachord.

[11] In my edition, the second version also appears on one particular occasion, in the *Sanctus,* which will be discussed in detail later in Chapter 11. See example 97.

[12] Obrecht is securely placed in much the same geographical area as la Rue for virtually all of the period from 1485-1504, and Compère can be placed in Northern France from 1486 onward, with his last 20 years spent in the centers of Cambrai, Douai and Saint Quentin near the (now) Belgian border.

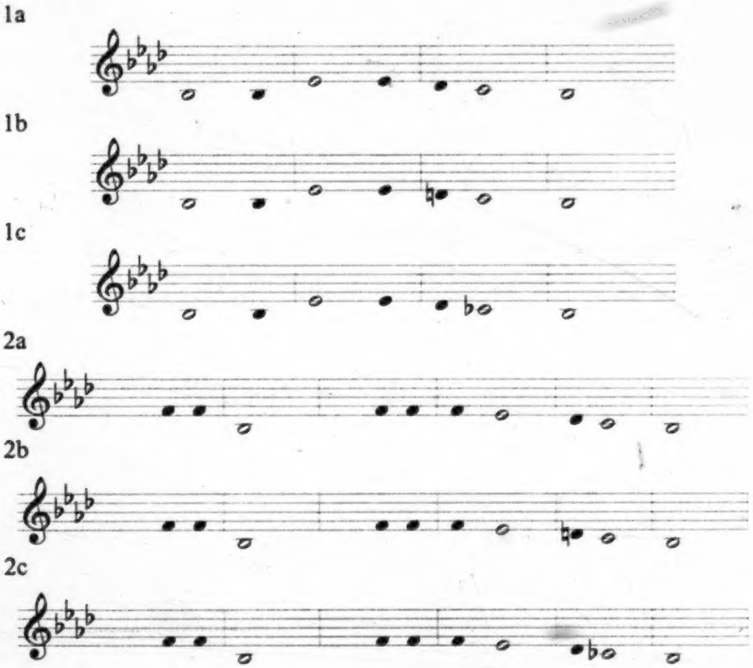
[13] Davison, Opera Omnia, lv. The so-called lydian paraphrase is in fact transposed hypolydian, as the tritone is always corrected.

[14] Nor is this unique to la Rue. Reese has noted that in Compère's *L'homme armé* Mass, the phrygian *cantus firmus* is on used in canon in such a way as "the mode is always other than Phrygian in the paired voice." Gustave Reese, Music in the Renaissance, (New York: W.W. Norton, 1954), 230.

At this stage, however, it is necessary to identify the key melodic units I believe la Rue uses as motives in the Mass as a whole. As foreshadowed earlier, these in effect involve the manipulation of the step-wise moving passages, and are almost always brought into play by chromatic alterations derived from the sorts of melodic or harmonic conventions with which we have been dealing, or by imitative use of a diatonic nature.

In order to highlight the intervallic difference between each set of variants, they are given in the following examples with the same starting pitches. This does not necessarily reflect their usage in the Mass itself, however, as in most cases each figure, or motives derived from them, appear in different transpositions. These variants are as follows:[15]

Example 54



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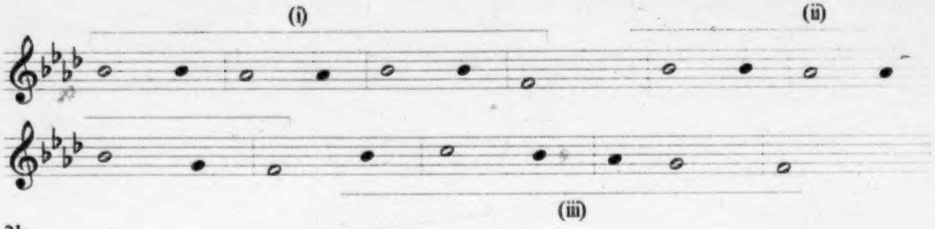
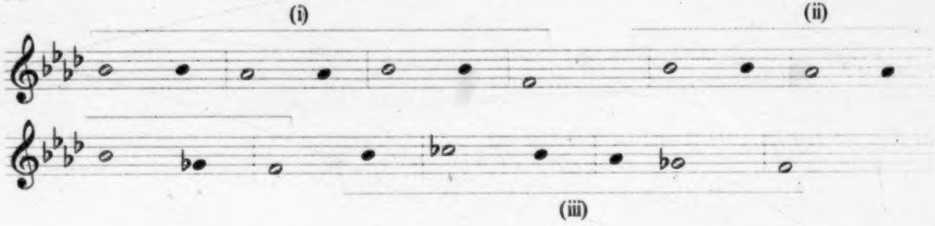
[15] I have notated these with only the suggestion of a rhythmic outline reflecting the original, as in many cases this rhythmic construction is not mirrored by la Rue's usage. Also note the outline of a melodic tritone associated with the phrygian versions, 2c (augmented 4th) and 3b (diminished 5th).

3a



3b



During the course of the discussions to follow I will consistently refer to what I see as la Rue's use of these contrasting modal signatures. The Phrygian inflected 1c, 2c and 3b will figure prominently in these discussions.

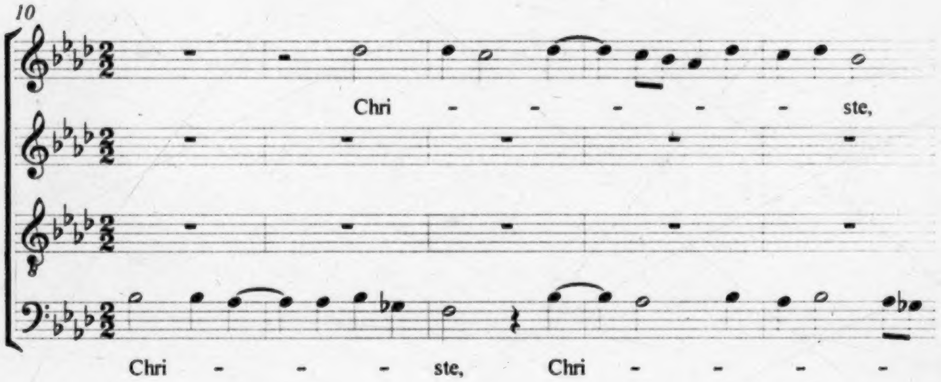
CHAPTER 7

Recta alterations

The opening duo of the *Christe* represents a prime example of a passage in which both parts could potentially function utilising either the soft or hard B. There are a number of reasons, however, why the use of B♮ (G♮ in my transposed edition) in this case is less than satisfactory.

In Davison's edition, an advisory B♭ (i.e. G♭ in my edition) is suggested for the bass in measure 11. This has clearly been done to avoid the harmonic tritone with the soprano.[1] Despite the passing nature of this dissonance, I am sure G♭ is correct here:

Example 55



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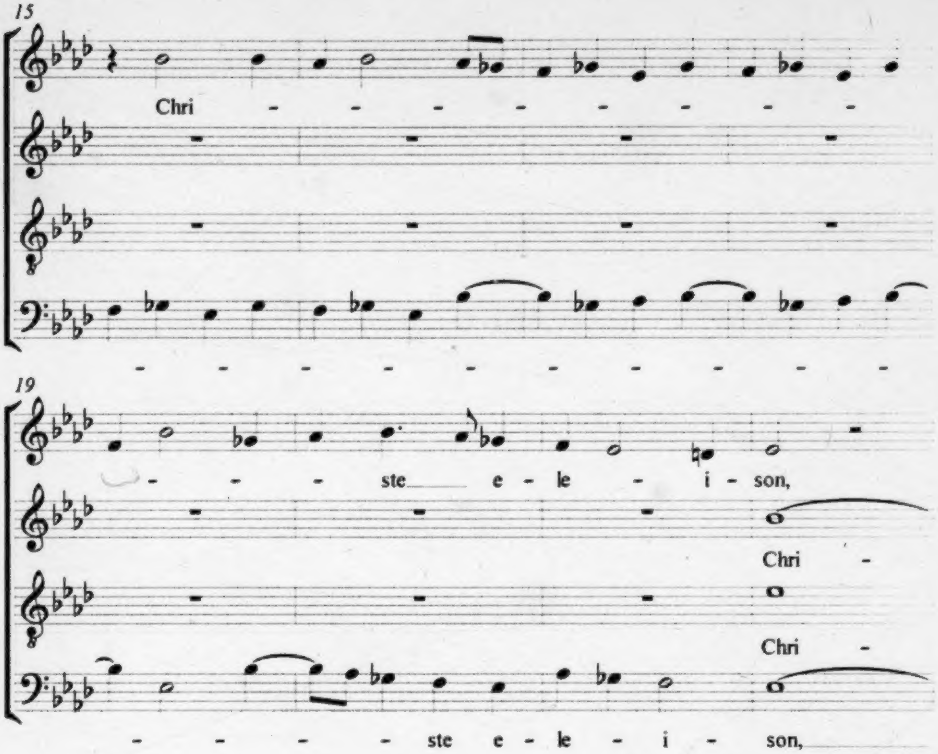
[1] It is also quite plausible when viewed purely melodically, and in isolation, as the version of this part of the *L'homme armé* melody I have marked as Example 54/3b(ii). Virtually the same progression part writing again occurs in measure 33, where once again Davison suggests the same alteration.



What makes this *whole* passage so intriguing, however, is what follows the initial G♭. The bass continues with a slightly varied form of what has just been sung, a passage which once again transcribes the falling fourth of Example 54/3ii of the chanson melody. The question is: which version is intended for use here, (a) or (b)? Having commenced with Example 54/3(b)ii, why then does Davison not still recommend the inflected B♭ (G♭)? Surely the singer would almost inevitably render the second in the same way, especially as this solution at no time transgresses the boundaries of *musica recta,* and fits neatly within the confines of the soft hexachord, as indeed does the whole passage, up to measure 35.[2]

---

[2] Further supporting evidence for this occurs in measure 27, where the 6th expanding to octave in the lower two parts is rendered major, in accordance with *causa pulchritudinis.*

If this is the case, the soprano not only should, but *must*[3] realise its line also in the soft hexachord from measures 15 though 22. It is perhaps no coincidence that from a purely melodic perspective this also seems a very natural procedure, one which once again requires no *ficta* alterations.

There is no doubting that the sound of the entire *Christe* section is fundamentally changed with this interpretation, but I am convinced that it represents a correct rendition of the passage. My conviction is only enhanced by the fact that it serves to provide a greater contrast with the flanking *Kyrie* settings. If it were not la Rue's intention to introduce this contrast in modal inflection, I am sure it would not be so clearly facilitated by the part writing. The fact that it *is* so easily achieved without ficta alterations seems to me conclusive evidence of its veracity.

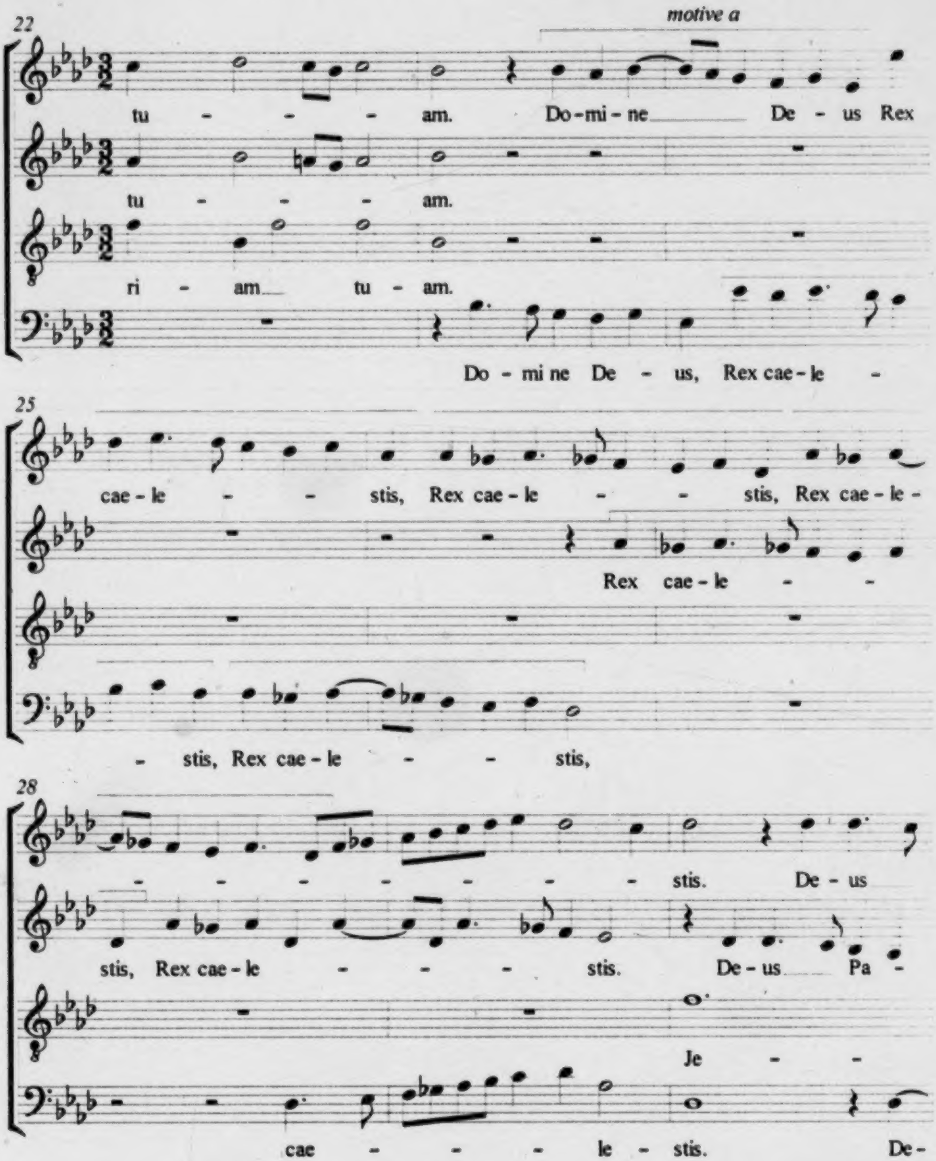
More evidence suggesting the necessity for *recta* alteration in certain passages is provided by the following example from the *Gloria.* After the cadence in B♭ which is established at measure 23, the next section of text is, typically for la Rue, set with a new motivic idea – paraphrased from the *L'homme armé* melody – in freely imitative style. Once again a number of factors contribute to the inescapable conclusion that this passage also requires *recta* alteration.

Here is the passage as I believe it should sound:

---

[3] As mentioned elsewhere in this study, hexachordal choices taken by other parts must surely have aurally influenced singers. Here, however, the G♭'s are essential to avoid *mi contra fa* hard and soft G's.

Example 56



motive a
22
tu - - - am. Do-mi-ne De - us Rex
tu - - - am.
ri - am tu - am.
Do - mi ne De - us, Rex cae-le -
25
cae-le - - stis, Rex cae-le - - stis, Rex cae-le -
Rex cae-le - -
- stis, Rex cae-le - - stis,
28
- - - - - - - stis. De - us
stis, Rex cae-le - - - stis. De-us Pa -
Je - -
cae - - - le - stis. De-

The motive on which this passage is built (*motive a*) is quite distinctive, and paraphrases the second part of Example 54/2b of the *L'homme armé* melody. The identifying falling/rising whole tone encompassed by the opening three notes of the motive, as well as its progression through a cycle of fifths so easily represented by the three hexachord arrays, suggests that this is a motive which may require same solmisation.

As the passage is examined in more detail, other factors which ultimately support this reading come to light:

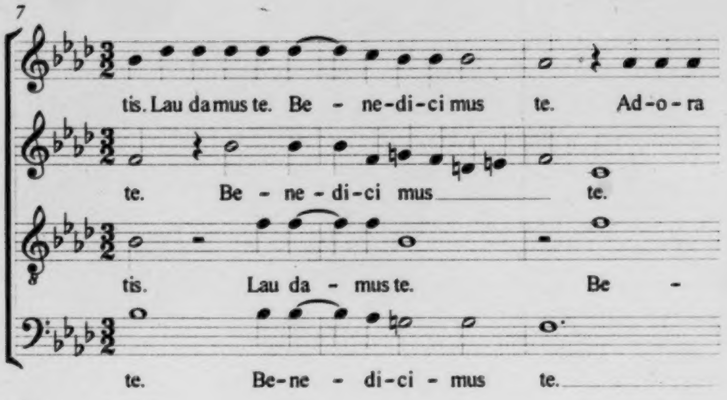
1. The desirability of avoiding the outline of a tritone in mm. 25-6, 28-9 (bass), and 27-29 (alto/soprano).
2. The strong 'tonal' implication that the passage works towards a cadence in D♭ (the 'root' of the soft hexachord) at measure 30.

Alteration of the passage neatly provides complementary solutions to both of these, as the tritone outline is easily avoided by the solmisation of the motive in the soft hexachord (on D♭), in the same manner as it has clearly just been solmised in both the hard and natural hexachords (on E♭ and A♭ respectively). All three parts, and particularly the bass in measure 28, invariably include D♭ as their lowest note in this extended passage. The likelihood that the tritone above this - G♮ - would be consistently used, seems to me virtually nil. The resulting cadence in D♭ at measure 30, which completes this particular imitative argument and ushers in the next text concept, therefore merely seems to confirm the 'tonal' direction the whole passage has been driving at.

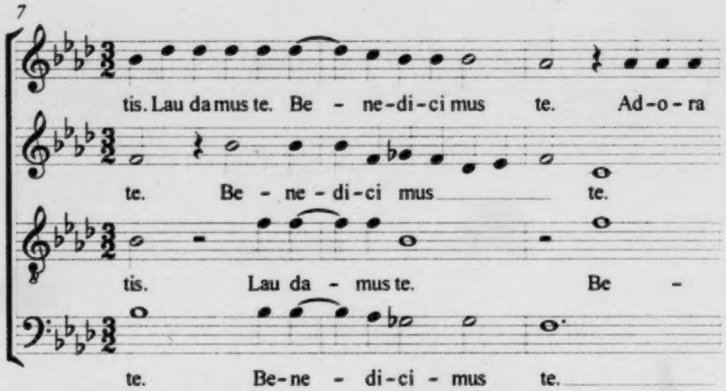
Various other straightforward examples in which the choice of G♭ is strongly indicated occur quite frequently in the Mass. Rather than detail all of these, which would revisit many of the arguments already expounded, I will now turn attention to passages in which similar decisions are less obvious, and therefore more instructive for the purposes of this thesis.

In the following example, I believe my final choice is justified by a number of important factors. Here are both the versions of the passage I see as possible:

Example 57a


7
tis. Lau da mus te. Be - ne-di-ci mus te. Ad-o-ra
te. Be - ne - di-ci mus te.
tis. Lau da - mus te. Be -
te. Be-ne - di-ci - mus te.

Example 57b

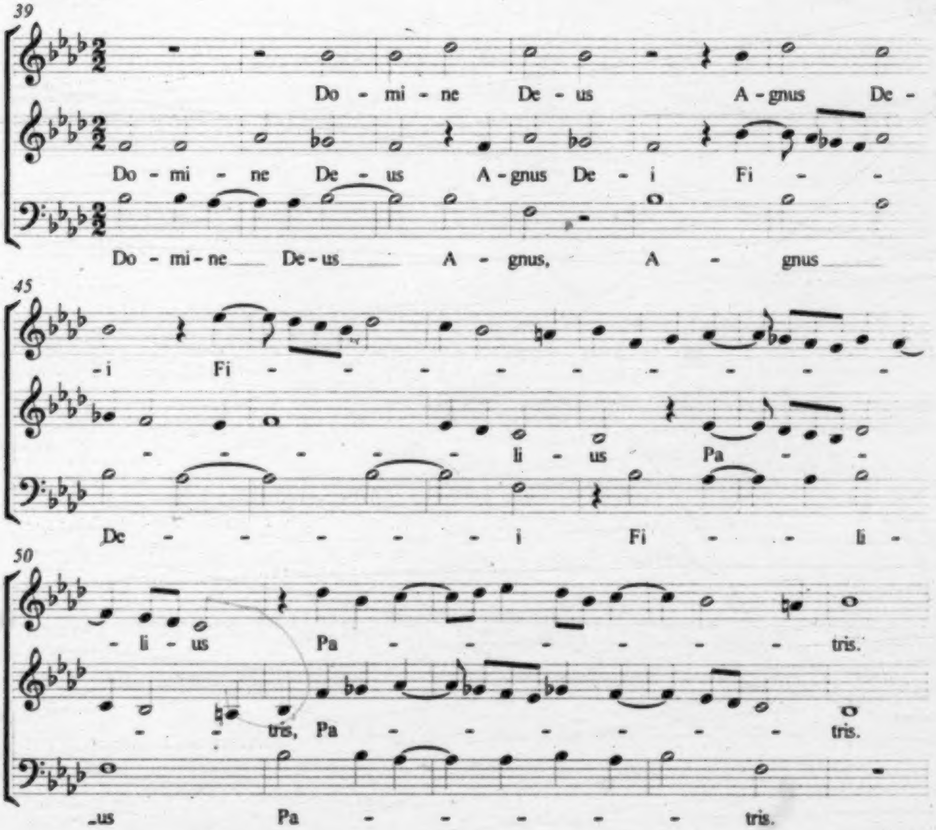

7
tis. Lau da mus te. Be - ne-di-ci mus te. Ad-o-ra
te. Be - ne - di-ci mus te.
tis. Lau da - mus te. Be -
te. Be-ne - di-ci - mus te.

Unaltered (that is without any accidentals), the passage contains a very awkward alto line in measure 8, featuring the outline of a tritone from G to D♭. On closer examination, the movement of the alto and bass from measures 8 to 9 also seems to require alteration as the two parts approach the octave unison. Of the two solutions which present themselves here, one involves the use of *ficta* (Example 57a), the other a simple *recta* alteration (Example 57b).

Seen within the isolation represented by the examples alone, both these versions look reasonable, but Example 57a above sounds unconvincing to me without A♮'s in measure 9, a solution which has somewhat more radical implications for the following passage.[4] In this instance, even if the *recta* alternative (Example 57b) were not to be preferred as a matter of policy, it seems to me the more likely of the two versions, as the additionof G♭'s in both the alto and bass parts results not only in a much more fluid and easily singable alto part,[5] but also in counterpoint that is consistent with theoretical practices I have described above.[6]

In the next example, also from the *Gloria*, G♭'s have been introduced for a number of reasons:

Example 58


39
Do - mi - ne De - us A - gnus De -
Do - mi - ne De - us A - gnus De - i Fi - -
Do - mi - ne De - us A - gnus, A - gnus
45
- i Fi - - - - - - - - - - -
- - - - - li - us Pa - -
De - - - - - i Fi - - li -
50
- li - us Pa - - - - - - tris.
- - tris, Pa - - - - - - tris.
-us Pa - - - - - tris.

---

[4] See the appendix for this alternative reading.

[5] Compared to the unaltered version.

[6] As well as consistent with la Rue's practice of utilizing differently solmised versions of the *L'homme armé* melody, as outlined in Chapter 6.

To be consistent with the concept of *causa pulchritudinis*, passages such as that between measures 40 and 41 should be altered; the approach to the perfect fifth/octave (m. 41) ideally being via the nearest possible imperfect consonance. In this case this means a *minor* 6th ⇨ perfect fifth between alto and bass, and *major* third ⇨ perfect 4th between the alto and soprano.

Further examination of the whole passage suggests that the G♭'s should apply throughout. Initially, this follows as it would be illogical to assume G♭ in measure 42 if G♭ had just been sung in the almost identical opening passage, and it is further justified in terms of *causa pulchritudinis* between the soprano and alto in measure 45. In measure 44 the (admittedly passing) G♭ is indicated as it allows the tritone dissonance with the soprano to be avoided. The same also applies in measure 52, where the D♭/G's in the upper two parts synchronise exactly on both occasions, strongly suggesting that the G should be flattened.[7]

A combination of these factors is also in evidence in measure 49, where the motion of the top two parts requires G♭ to avoid a tritone with the alto, as well as to retain the strict parallelism seemingly demanded here. From the 3rd to the 4th beats of this measure, the same factors we have already observed operating in measures 40-41 and 45 recur, once again require G♭.

I believe it cannot be a coincidence that all of the instances of G appearing in the alto in this section, for some reason or another, point to downward alteration. The conclusion I have therefore reached is that the *recta* G♭'s apply throughout. Perhaps the final vindication of this analysis occurs in the postlude to this 3-part section – the *Qui tollis* – in which it is surely necessary to inflect the G's in the bass part to avoid *mi contra fa* with the soprano.

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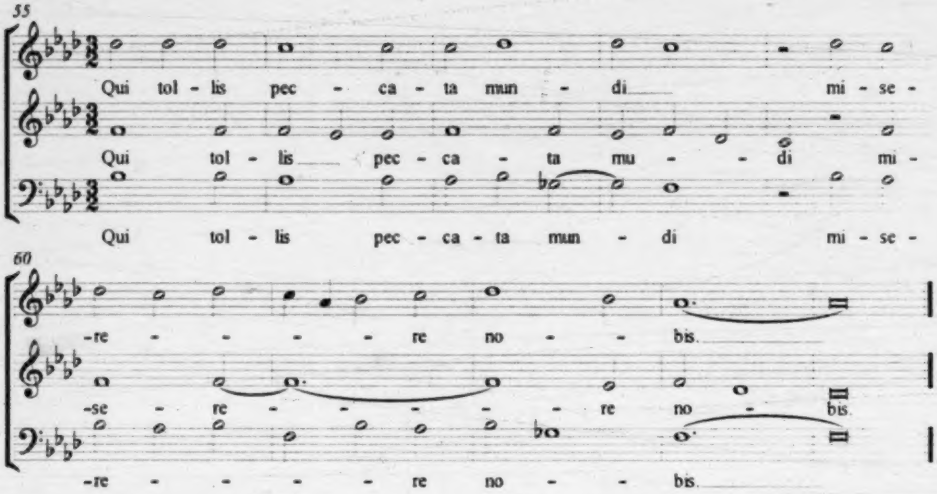
[7] Which in turn suggests the G in measure 51 should also be a flat.

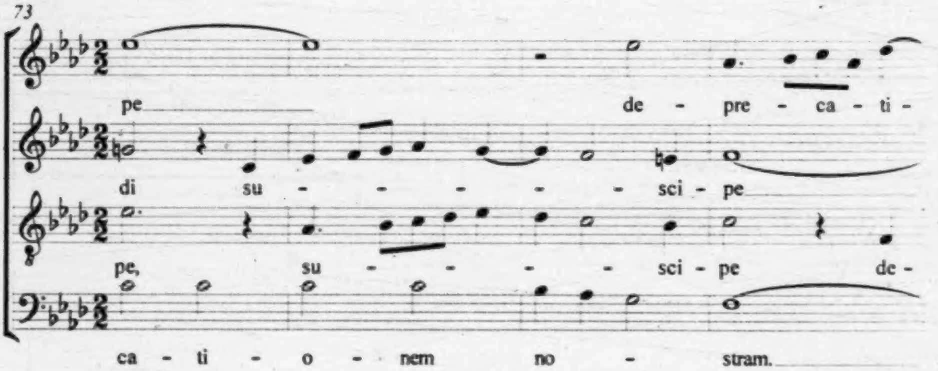
Example 59

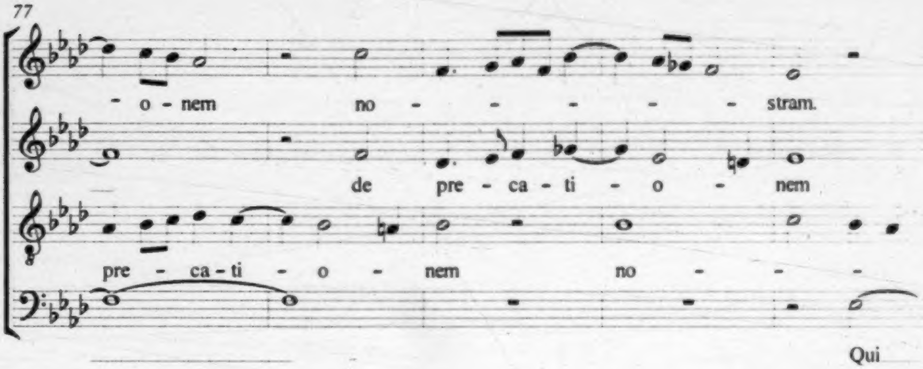

55
Qui tol - lis pec - ca - ta mun - di mi - se -
Qui tol - lis pec - ca - ta mu - - di mi -
Qui tol - lis pec - ca - ta mun - di mi - se -
60
-re - - - - re no - - bis.
-se - re - - - - - - re no - bis.
-re - - - - re no - - bis.

The whole section (Examples 58 and 59 together) is therefore revealed as consistent in its contrasting (transposed hypodorian) modal make-up, and provides another example of la Rue's modal inflection of the *L'homme armé* melody.

Another example of where discretion is required in making a choice between the soft and hard G occurs in the passage from measures 73–81 in the *Gloria:*

Example 60





At the opening of this excerpt, G♮ in the alto is clearly required so that the fifth to the following C can remain perfect, however, over the next two measures a passing harmonic tritone is unavoidable no matter what solutions present themselves, as the G sounds against both C (m. 74 in the bass) and D♭ (m. 75 in the tenor). In this case there is no strong reason to alter the G, and to do so complicates this passage unnecessarily.[8]

In the section of Example 60 which immediately follows this, however, the case for G♭'s seems to me entirely compelling. Consider the motivic material which makes up measures 76 (soprano), 77 (tenor) and 79 (soprano/alto). Each of these variants is loosely based on versions of Example 54/2 of the *L'homme armé* melody, and each also encompasses a rising fourth, which should be perfected to avoid the tritone on key structural harmonic tones. In this case, therefore, the soft hexachord (G♭ *fa*) is strongly indicated for the alto passage from measures 78–82. If this is the case, it would be perverse of the soprano *not* to sing G♭ in the subsequent measure.

The next example, also drawn from the *Gloria,* is particularly interesting for the sheer variety of justifications the music provides for the incorporation of the *recta* G♭'s. Here is the passage in what I believe to be its correct form:

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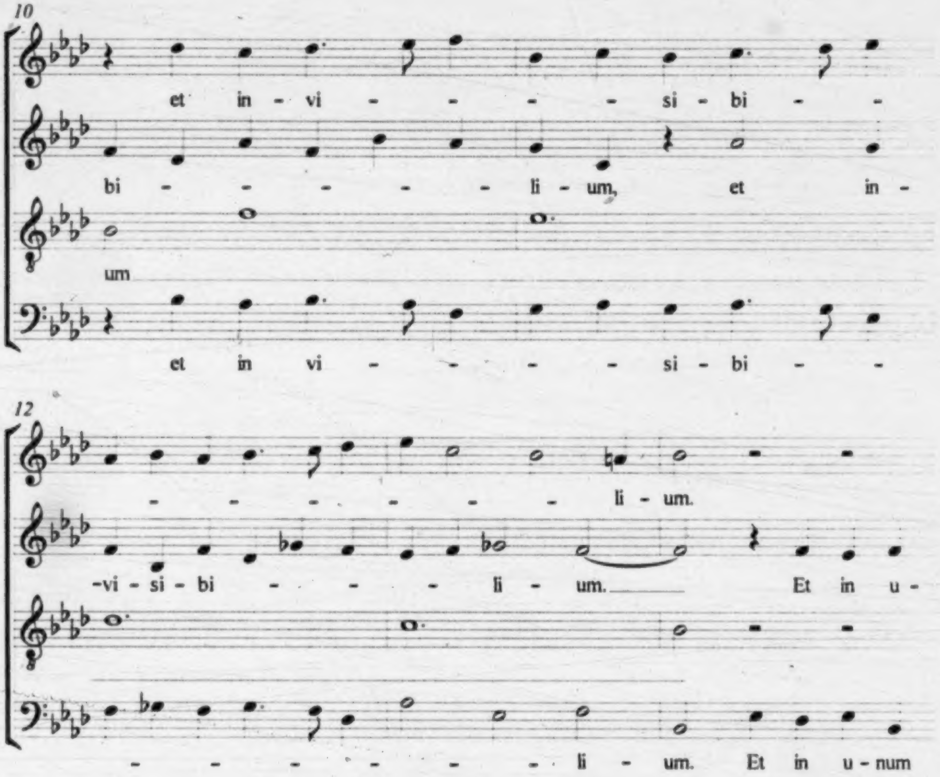
[8] Especially as it would eliminate the wonderful simultaneous cross-relation E/E♭ in measure 75. This dissonance would be rendered unlikely by the linear chromaticism thereby created were the G a G♭.

Example 61


10
et in - vi - - - - si - bi - -
bi - - - - - li - um, et in -
um
et in vi - - - - si - bi - -
12
- - - - - - li - um.
-vi - si - bi - - - li - um. Et in u -
- - - - - - li - um. Et in u - num

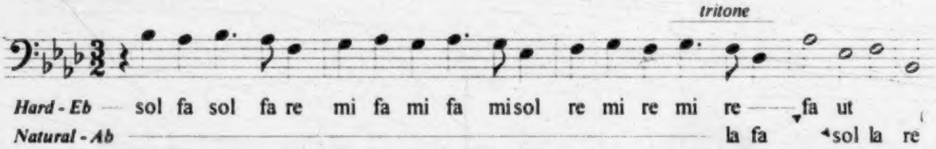
Ignoring for a moment the alterations I have marked here, at first sight two features seem to stand out, arousing suspicion that here too there may well be another instance where the soft G is intended:

1. The direct melodic tritone in the alto at measure 12, which needs alteration.
2. The necessity for the *cantus firmus* D♭ in the tenor part to co-exist with the written G♮ in the same measure.

A detailed examination of the passage reveals much more to be involved, however. Firstly, the sequential construction of the soprano and bass lines suggests that G♭ is required in measure 12; and secondly, in measure 13, the progression to the F in the alto coinciding with contrary motion movement to the F an octave lower in the bass suggests that a *causa pulchritudinis* alteration is required at this point.[9]

The simultaneous coincidence of these factors seems to strongly suggest that alteration is required here. Points 1 and 2 above both immediately point to G♭'s, at least in this measure, but how much further should this alteration apply?[10] Clearly in measure 10, G♮'s are still required – the descending G ⇨ C perfect fifth in the alto part provides conclusive evidence of this – but a close examination of the bass part in measure 12 strongly suggests G♭. In measure 10 the bass is solmised in the hard hexachord on E♭, but when the part descends below E♭ (m. 12), should the mutation be to the natural or soft hexachord? If one assumes the non-adjacent natural hexachord (on A♭), the last 3 notes of measure 12 outline an awkward tritone, and also require the line to mutate back up into the hard hexachord to accommodate the A♭ in measure 13:

Example 62a



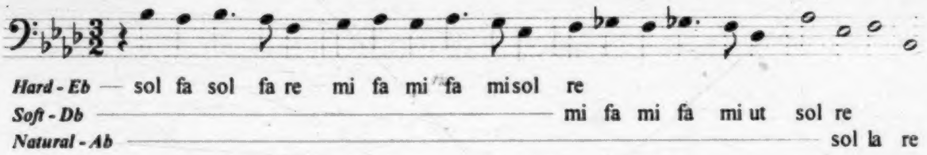
A far more logical solution, one which surely singers even sight reading a section like this would naturally have adopted, is to make the mutation into the adjacent soft hexachord at the beginning of measure 12, then into the natural hexachord for the final notes of the phrase:

---

[9] G♭ is indicated in the alto, as the alternative - E♮ in the bass – is clearly impossible. This G♭ creates passing tritones with both the soprano and tenor, however I believe the counterpoint with the bass is a stronger influence here.

[10] As well as into measure 13 in the alto part, as once in the soft hexachord, there would be no reason to mutate back out again here. (Also *causa pulchritudinis* with the bass requires the G♭ here).

Example 62b

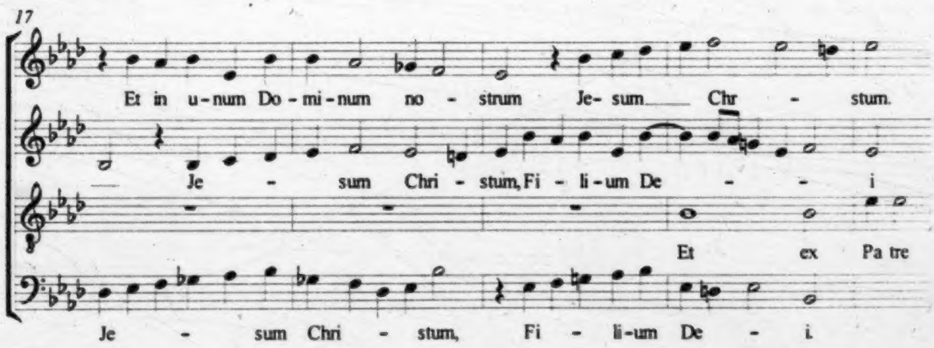

Hard - Eb — sol fa sol fa re mi fa mi fa mi sol re
Soft - Db mi fa mi fa mi ut sol re
Natural - Ab sol la re

Of course, as we have already seen, there are other factors involved here, and the obligatory G♭ in the alto in the same measure, combined with the sustained D♭ heard in the tenor part - simultaneously with the events just described here - suggest once again that this type of alteration would have been made automatically by singers.

One final note of interest here concerns the actual timing of the mutation into the soft hexachord in the bass at measure 12, or in effect, whether the first or second G in that measure should reflect the mutation. To determine this, the double sequence in the outer parts from measures 10 to 12 is most instructive. La Rue uses sequences sparingly, but often with telling effect. Here both parts feature sequences, and, in the case of the bass part, the sequence is logically continued if the first G♭ is taken at the beginning of measure 12; this provides one more complementary piece of evidence to support my reading of this passage.

An issue I have not covered hitherto is where the hard G should return when *recta* G♭'s have prevailed for any period of time. Again judgement is called for, and more than one possibility is sometimes indicated. Take the following example from the *Credo*, for instance:

Example 63


17
Et in u-num Do-mi-num no - strum Je- sum Chr - stum.
Je - sum Chri - stum, Fi - li-um De - - i
Et ex Pa tre
Je - sum Chri - stum, Fi - li-um De - i.

In this example, the prominence of the D♭ as the lowest tone in the bass part in measure 17–18, and the strong structural significance of the G's in these measures, require *recta* G♭'s in both cases to avoid the melodic tritone. In measure 20, however, the bass moves down to the B♭ below D♭, so clearly a mutation is required. The issue is where should this mutation take place? I believe both G♮ and G♭ are possible in measure 19, but perhaps the more logical place for the mutation to occur is on the E♭ (*re* in the soft hexachord and *ut* in the hard hexachord) at the beginning of measure 19. This is facilitated by the rest at the beginning of the measure, and would allow the descending fifth from measures 19 to 20 – by which the mutation required to include the low B♭ would be effected – to be solmised as *la* ⇨ *la,* in keeping with Yssandon's 'rules' for *ficta* mutation via large intervals, discussed in Chapter 3 (i).[11]

In the final extended section of the *Credo,* the longest uninterrupted passage of music in the entire work, I have decided to favour the soft G♭ in most places, a decision which I believe is justified by strong supporting evidence.

After the introduction of G♭ in measure 118,[12] the music progresses without the use of either version of G until measure 127, where the alto and bass employ a pair of virtually identical motives engaged in effective parallel tenth movement; a duo which is immediately echoed by the inner parts at measure 131. It is the first of these duos which I believe must determine the *recta* choice to be made here.

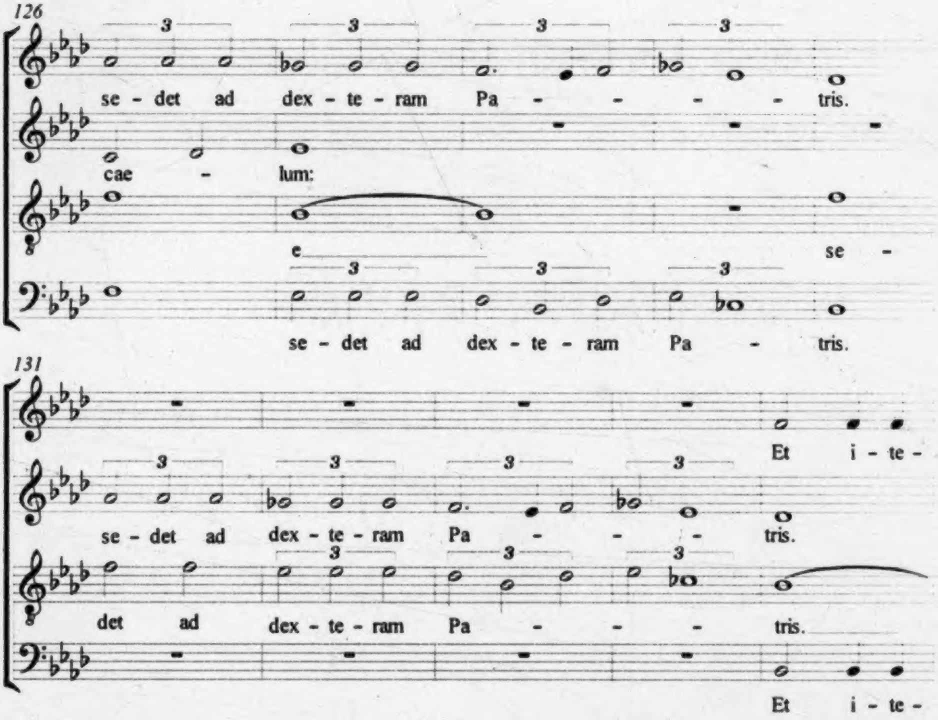
---

[11] Thus the end of this phrase (m. 20) is actually realised on a *ficta* B♭ hexachord, as I have altered the resulting *la-sol-la* progression at the beginning of measure 20 in accordance with the principles discussed in Chapter 3(iii).

[12] See the discusion based around Example 79 in Chapter 8.

In the progression from measures 127–128, the held B♭ in the tenor creates a perfect fifth below the soprano, therefore the contracting sixth between these two parts which proceeds the perfect consonance should be *minor*, in keeping with *causa pulchritudinis.*[13] The soprano part in measures 129–130 also strongly suggests G♭, since otherwise the inclusion of the tritone G ⇨ D♭ becomes very awkward. Once again complementary evidence weighs heavily on the side of G♭, and if this passage is so altered, so too must its virtually exact repetition, which follows.[14]

Example 64


126
3
se - det ad dex - te - ram Pa - - - - tris.
cae - lum:
e
se -
se - det ad dex - te - ram Pa - tris.
131
Et i - te -
se - det ad dex - te - ram Pa - - - tris.
det ad dex - te - ram Pa - - - tris.
Et i - te -

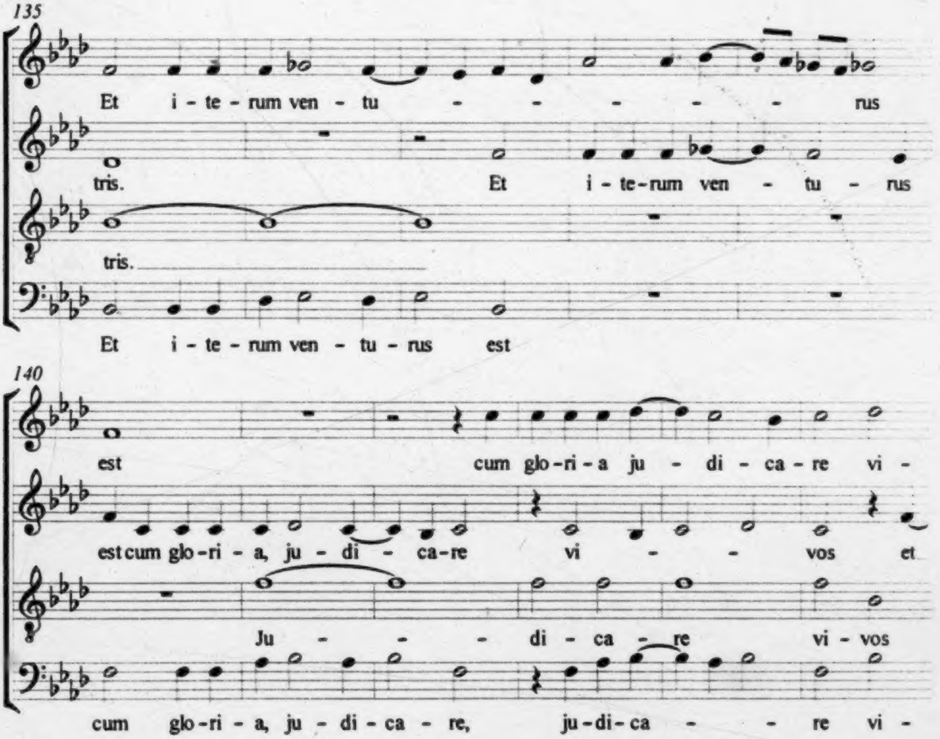
---

[13] I experimented greatly with this section, and the G♮'s never convinced. I am sure the reason lies behind the fact that I am now conditioned to hear this harmonic relationship in this particular way, that is to favour the *minor* 6th to 5th movement above a sustained tone. One wonders whether this type of aural conditioning is really all that different to what might have been experienced by Renaissance singers.

[14] I will come to the C♭'s notated at measures 129 and 134 in Chapter 10.

Following this section, the appearance of the new text *Et iterum venturus est* . . . again sees la Rue employ pairs of motives in counterpoint (see Example 65 following). In measures 139-140, the typical Renaissance close-quarter suspension counterpoint embellishing the cadence clearly needs alteration, either as a suprasemitone cadence on F, or with a leading tone E♮. If one considers the alto as an exact imitation of the soprano just heard from measure 135, the choice is straightforward, as the soprano version was placed against a sustained B♭ in the tenor, making applicable the same *causa pulchritudinis* argument expounded for the section immediately previous (allowing the whole of the soprano passage to be solmisable in the soft hexachord). The decision to render this passage - wherever it occurs - as *mi–mi–mi–mi–fa–mi–re–mi* is immediately vindicated when la Rue transposes the motive to start on C *(mi)* in the measures which immediately follow (140–145).

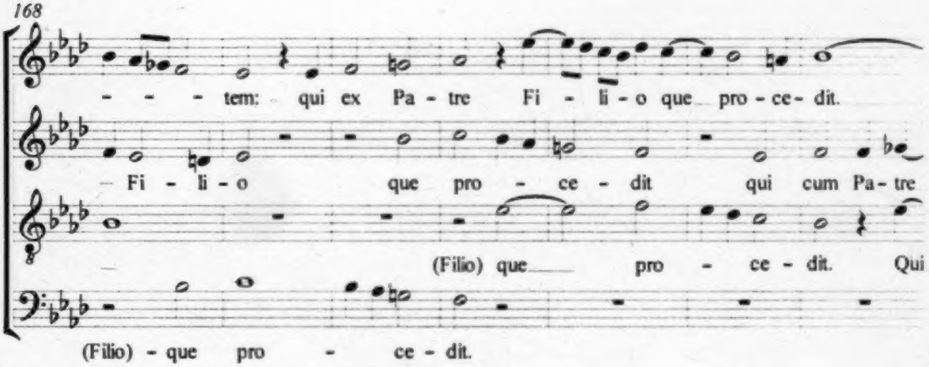
Example 65


135
Et i - te - rum ven - tu - - - - - - rus
tris. Et i - te - rum ven - tu - rus
tris.
Et i - te - rum ven - tu - rus est
140
est cum glo - ri - a ju - di - ca - re vi -
est cum glo - ri - a, ju - di - ca - re vi - - vos et
Ju - - - di - ca - re vi - vos
cum glo - ri - a, ju - di - ca - re, ju - di - ca - - re vi -

In the passages which follow, many of these issues recur, resulting in the same conclusion: that G♭ is usually intended throughout.

I say 'usually' as there are a couple of exceptions. The first of these occurs between measures 169 and 174, where the *recta* hard G's return. It is noticeable that the final bass note of virtually every phrase[15] of this section so far (from measure 111 onwards) has been either B♭ or E♭. The F here, along with the impact of the bass/alto/tenor motive – *que procedit* – thus make this short passage quite striking. This effect is brought about by the fact that, from measure 111 onwards, the various motives drawn from the *L'homme armé* melody have successively been appearing as *cantus firmus* structural support in the tenor. At this point, however, la Rue contrives for the bass to break in with the unambiguous first statement of Example 54/3a in its untransposed form, now used as the vehicle for what really amounts to a 'tonal' reorientation.[16]

Example 66


168
- - - tem: qui ex Pa - tre Fi - li - o que pro - ce - dit.
- Fi - li - o que pro - ce - dit qui cum Pa - tre
(Filio) que pro - ce - dit. Qui
(Filio) - que pro - ce - dit.

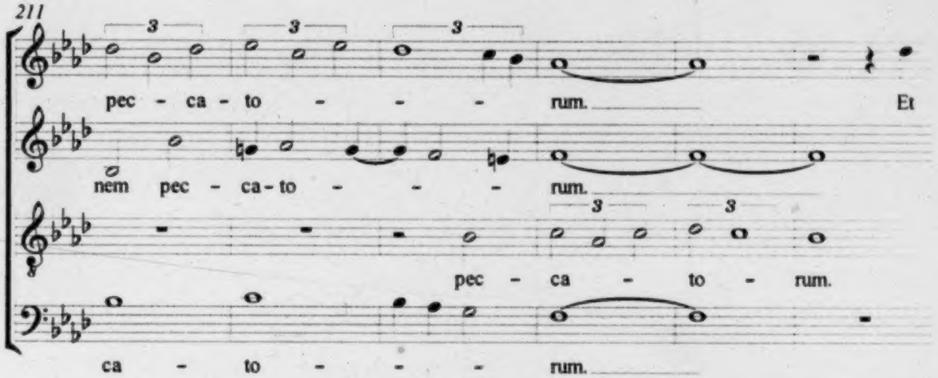
---

[15] The section from measure 138 to measure 148 references F as the lowest note, but the modal identity here is still strongly B♭ transposed hypodorian, as the crucial fifth above the lowest note – C – is here never present. Thus the 'tonal' shift I identify in this section sounds quite startling.

[16] The possibility of this being a *fa super la* C♭ above the hard hexachord is ruled out when one considers the exact imitation of this bass part – at the octave - in the alto from measures 170 to 172. C flat here would produce a harmonic tritone with the bass, so both C's must be natural.

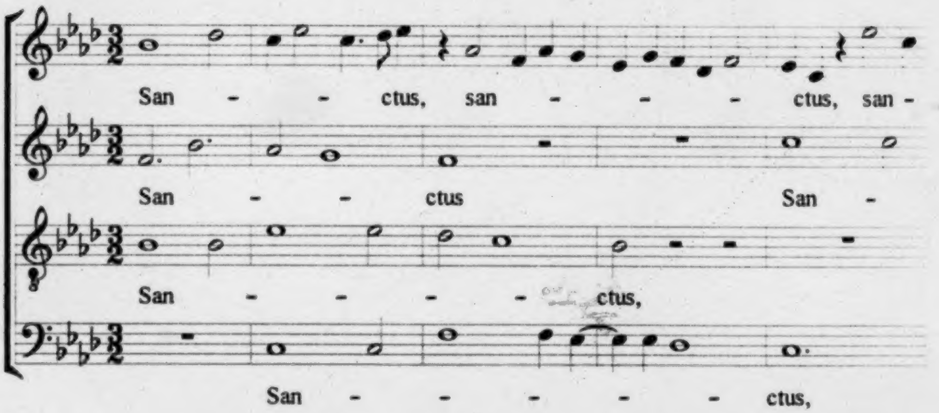
The other significant exception I referred to above occurs in the passage between measures 211 and 216, where the use of the hard hexachord in the bass, and the resulting need to avoid the harmonic tritone, requires the use of G♮'s in the alto:

Example 67



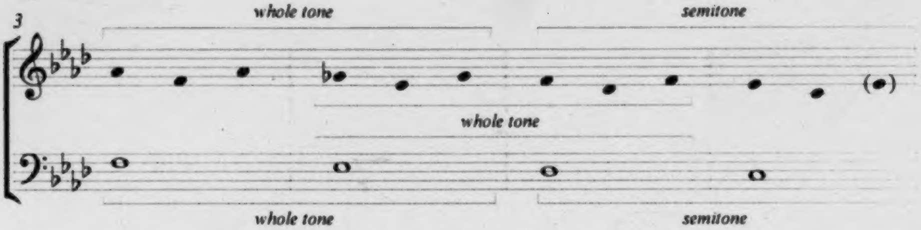
Another situation in which a decision must be made concerning the identity of the G occurs at the opening of the Sanctus. The sequential construction of the soprano part in measures 4-5 once again draws attention to the awkward tritone from G ⇨ D♭ in measure 4. Why does this sound so wrong? Here is the section unaltered:

Example 68



In the soprano in this instance, the outline of a melodic tritone is unavoidable, as the compass of the melody in measures 3-4 must either contain G ⇨ D♭, or G♭ ⇨ C. What makes the choice of G♭ in measure 4 obligatory, I believe, is the sequential structure of the part and its relationship to the bass. This can be analysed in two ways:

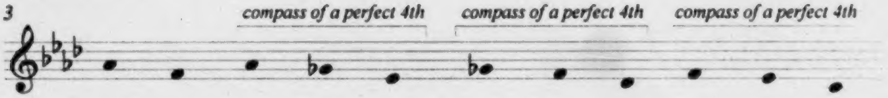
Example 69a



The G in measure 3 sounds as a functional tone, rather than a passing one; as is shown by this simplification of the motion of the sequential parts. Also revealed here is another reason the G♭ sounds so convincing (and the G♮ wrong): conjunct movement of the two parts is achieved only with the alteration.

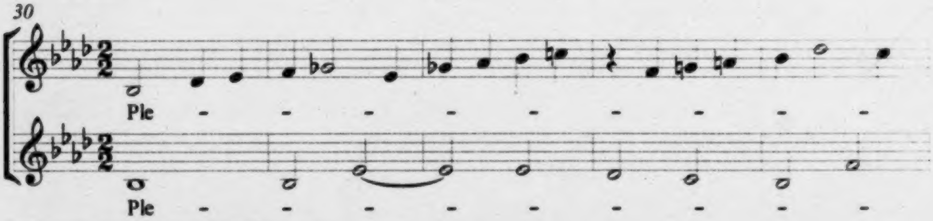
These aural impressions are further supported when one looks at the sequence in the top part from a different phrasing perspective:[17]

Example 69b



A similar section in which the outline of a melodic tritone cannot be avoided occurs at the opening of the duo which makes up the *Pleni* within the *Sanctus:*

Example 70



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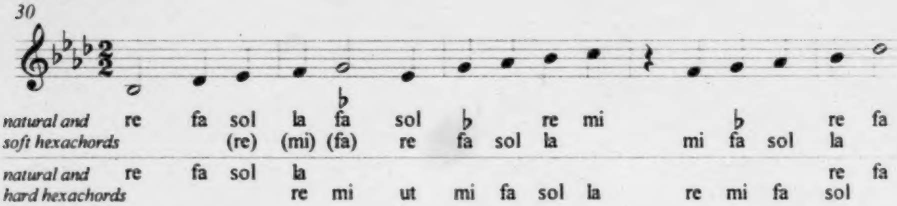
[17] Thus the requirement to correct *this* tritone, rather then the G♭ ⇨ C must take precedence, as the potential G to D♭ interval is placed in far more immediate juxtaposition – separated by just one intervening pitch, rather than four as with the former. All these aspects combine to render the solution offered above the only satisfactory one.

If we examine the opening five measures, no matter what *recta* identity is finally given to the G, a melodic tritone will occur either between measures 30 and 31, or within measure 32. The only possible alternative would be to use both hard and soft G's, thereby introducing a cross-relation from measure 31 to measure 32.[18]

Let us look at the two possible solmisations of this passage:[19]

Example 71


30
♭
natural and soft hexachords
re fa sol la fa sol ♭ re mi ♭ re fa
(re) (mi) (fa) re fa sol la mi fa sol la
natural and hard hexachords
re fa sol la re fa
re mi ut mi fa sol la re mi fa sol

It follows from the normal hexachord order that the natural and soft hexachords would interlock more readily than the natural and hard hexachords in an incrementally ascending passage such as this. Moreover, the convention of *fa super la,* discussed in Chapter 3(ii), may well provide an alternative to a virtually immediate mutation – on the first E♭ *sol re* – thereby holding the natural hexachord until the mutation is forced by the extension of the melodic line above G♭. The seamlessness of this mutation is particularly compelling, as the G♭ in the second measure – *fa super la* in the natural hexachord – is also *fa* in the soft hexachord.

The alternative reading shows just how much more desirable the former is. To consider the first G as a natural, the mutation into the hard hexachord must be triggered at F *la re* in measure 31, which serves to highlight the tritone from the D♭ to the first G, respectively solmised in the natural and hard hexachords as *fa* and *mi;* already familiar as uncomfortable bedfellows in their vertical harmonic combination. It does not stretch logic too far to realise their unsettling significance in this melodic context as well, with just two pitches separating them.[20]

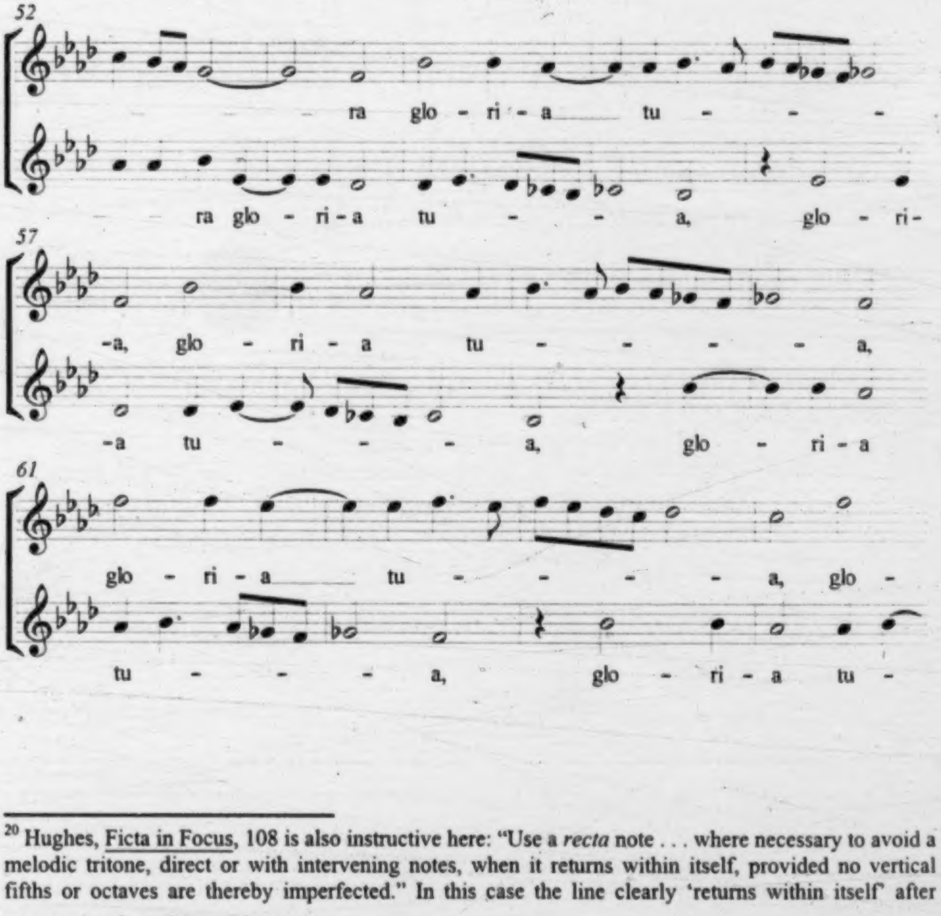
---

[18] The cross-relation itself should not, as a matter of principle, present a problem. In this case the question concerns where the most judicious place to make the mutation will lie.

[19] I have discarded the possibility that both the C and F in the third to fourth measures could be flattened, as this seems very unlikely and unjustifiably radical possibility. It should also be noted that the final version of this passage in my edition of the Mass utilizes a *ficta* alteration moving to the Bb in the final measure of this example. This will be discussed in greater detail later. For my purposes now, however, the solmisations which follow do not take harmonic implications into account.

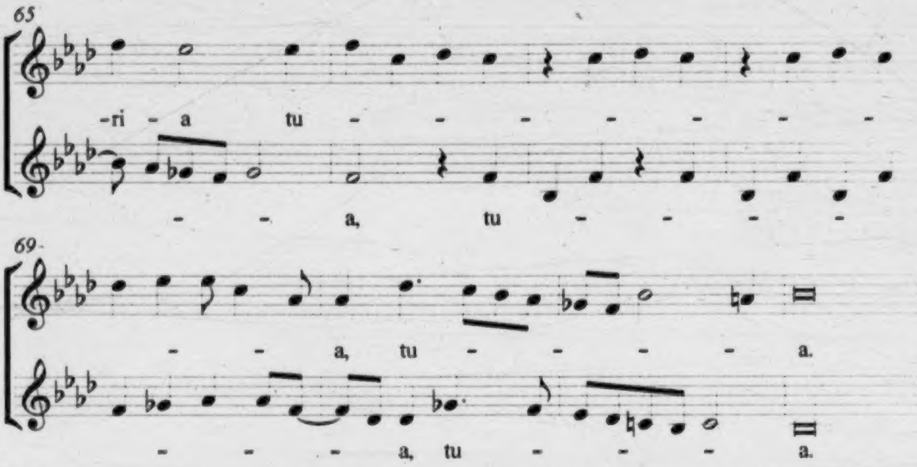
This *Pleni* contains another passage which presents particular challenges in the areas of both *musica recta* and *musica ficta.* The most fascinating of these emerges in the extended imitative dialogue from measures 52–66, set to the text *gloria tua:*

Example 72


52
ra glo - ri - a tu - - -
ra glo - ri - a tu - - a, glo - ri-
57
-a, glo - ri - a tu - - - - a,
-a tu - - - a, glo - ri - a
61
glo - ri - a tu - - - - a, glo -
tu - - - a, glo - ri - a tu -

---

[20] Hughes, Ficta in Focus, 108 is also instructive here: "Use a *recta* note . . . where necessary to avoid a melodic tritone, direct or with intervening notes, when it returns within itself, provided no vertical fifths or octaves are thereby imperfected." In this case the line clearly 'returns within itself' after progressing from D♭ to G♭.



The first issue to be addressed here is whether this melodic construction requires same solmisation or whether it should allow the duo to operate purely diatonically. That the question needs asking is confirmed by the observation that the structure exists in three different pitch domains, in an ascending cycle of fifths: (i) on E♭ (commencing in mm. 52 and 56); (ii) on B♭ (mm. 54, 57, 59 and 63); and, most importantly, (iii) on F (mm. 61 and 64). While it would be possible to remain in the diatonic realm[21] and provide same solmisation for this passage with one imitation (at the fifth), it is not possible in this instance to do so with successive fifths (E♭ ⇨ B♭ ⇨ F), as the F version demands a different solmisation. Some may not regard this as a matter for great concern, however, a closer examination of the passage reveals evidence to suggest it was of concern to la Rue. In this regard the following need to be considered:

1. The modal identity of the fragment of the *L'homme armé melody* on which the motives are based, which in turn brings the issue of the sub-semitone into prominence.
2. The consistent manipulation of these motives to coincide in octave unisons, thereby raising the issue of *causa pulchritudinis*.

---

[21] With either *recta* version of G.

3. The inescapability of the use of *recta* G♭'s in measures 69 and 70.

Let us consider the first of these issues in more detail. The F version of the motive presents itself wholly within the natural hexachord, solmised as *la–la–sol–sol–la–sol–la–sol–fa–mi–fa–mi*, which is consistent with one version of Example 54/3(iii) of the *L'homme armé* melody. It also differs from the solmisation of the other two pitch orientations that appear here - should they remain unaltered - both of which would commence with *sol.*

Why should we even consider the possibility of altering one or the other of these to try to make them intervallically identical? One reason might be their particularly strong identification with the chanson melody, but there is another consideration. I have decided to inflect the E♭ and B♭ versions of the motive because in many places the manipulation of the motives conspires to have them coincide in octave unisons at key places in the phrasing of one or the other. These octaves occur at measures 55, 59, 62, and 66. In each case the issue is whether a sub-semitone or a supra-semitone progression is required in order to make the sixth before the octave major. In this instance, I have discarded the possibility of the sub-semitone, since applying it would destroy the modal identification of the melody with the *L'homme armé* melody. What are the implications of this reading?

Firstly, the alteration of the G's in measures 56, 59, 60, 61, 62 and 65 are *recta* alternatives, and place the general domain of these lines firmly within the soft hexachord. It should also be noted that the use of the soft hexachord makes the *next* flat (C♭) a far more likely candidate for introduction as a ficta alteration;[22] which indeed occurs when the same logic is applied to the E♭ version of the motive; introducing *ficta* C♭'s in measures 54, 55 and 58. As a result of this interpretation:

1. The motive is solmised identically in all appearances

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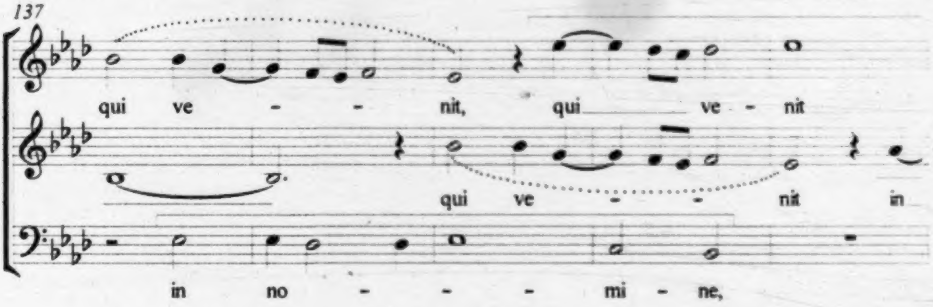
[22] In a signature of 1 flat, the next flat, E♭ (here equivalent to C♭), is considered *recta*.

2. All octave perfect consonances are approached by the nearest imperfect consonance.
3. The modal identity of both voices is the same regardless of pitch difference.

I find it difficult to believe that these factors could all occur as a matter of coincidence, and therefore suggest that this is indeed the correct way to perform this passage. If one looks at measures 69 and 70, where the soft hexachord is made virtually obligatory by the direct tritone which would result if it were not used, this provides further strong evidence in favour of the whole passage being realised utilising the soft hexachord. This in turn suggests ficta C♭'s in measures 54-55 and 58-59, as otherwise C♮ would stand in obvious discord with all other interlockings of the duo, quite apart from any of the other considerations mentioned above.[23]

The *Benedictus* presents two extraordinary passages where choices abound and where I am sure more than one solution is possible. Once again, decisions have been made in a manner as consistent as possible with the practices I have been using throughout this discussion. The first of these passages, without alteration, is as follows:

Example 73



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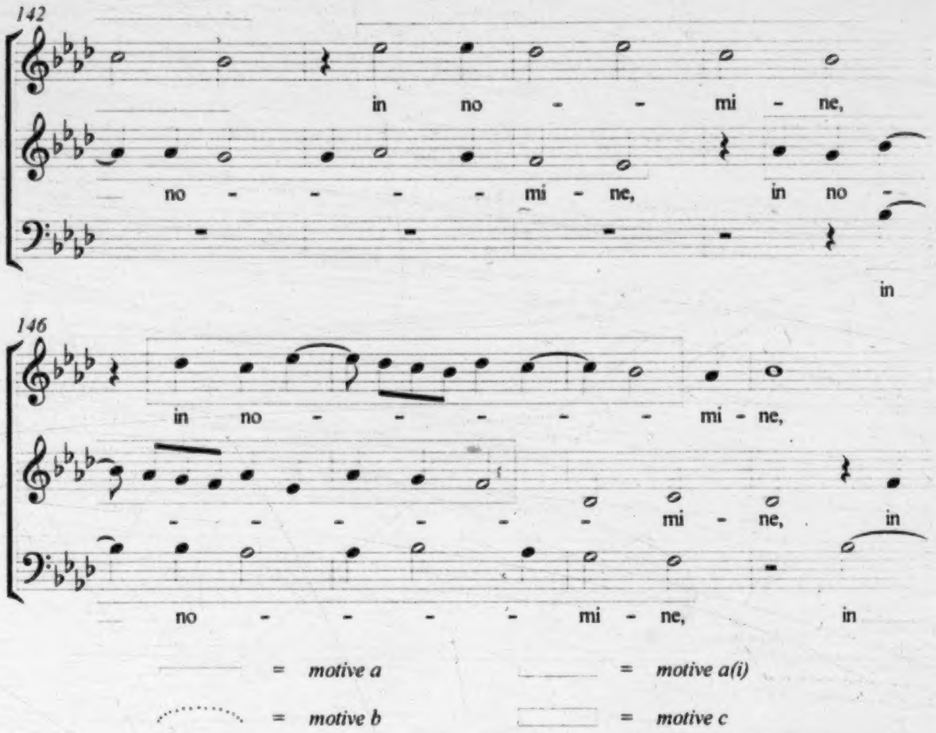
[23] The final cadence should still use C natural and the sub-semitone A natural, as the descent from G♭ in the alto would require mutation from the soft hexachord into the natural hexachord on A♭, thereby mandating C *mi*. The range of the construction of the melody in its previous use (starting on E♭) within the duo could be accommodated fully within the imagined *(ficta)* hexachord on G♭.



A number of variant motives based on the *L'homme armé* melody are at work here, freely used in an ingenious fashion. The bass in measures 137–140, and soprano (twice) between measures 139 and 145, are clearly derived from Example 54/3a(ii) – *motive a,* while the very closely related *motive a(i)* forms the basis of the alto in measures 141–144, and bass in measures 145–148. *Motive b,* on the other hand, is derived from the descending steps covering the fifth in Example 54/2, while *motive c* is a freer, more abstract paraphrase of Example 54/3.

Many octaves arise from the interplay of these motives. In all cases these coincide with the final note of a phrase in one of the parts involved, and thus certainly require alteration in accordance with the principle of *causa pulchritudinis.*

Particularly interesting are the ramifications for *ficta* of the use of the soft G in this passage. G♭ is originally indicated in the soprano in measures 137–138 as this is pitted against the sustained B♭ of the tenor, creating a progression of the type illustrated by Example 26[d]. The distinctive nature of this motive, as well as the fact that it is immediately repeated in the alto in measures 139–141, suggest same solmisation is called for here, which in turn leads to the necessity to add a *ficta* C♭ in the bass in measure 140, in order to avoid *mi contra fa* with the alto; a decision which will either be supported or refuted as examination of the passage continues.

I also feel both varieties of *motive a* should be solmised in the same manner on each of their appearances, i.e. *la-la-sol-sol-la-fa-mi* on the *ficta* hexachords of G♭ and C♭.[24] Thus in measure 144, F♭ should appear in the alto, and D♭ (not natural)[25] in the soprano. This keeps the solmisation of these motives consistent, and, as a result, keeps the imitation at the fifth heard in the top two parts - from the alto entry at the end of measure 141 to the end of *motive a* in the soprano in measure 145 - intervallically exact.

Only the additional *ficta* D♮'s added to this motive in measure 138 (bass) and 140 (soprano) work against the principle of same solmisation for this passage.[26] I consider the twin demand of the sub-semitone and *causa pulchritudinis* to have greater weight here than the need for same solmisation. Additionally, if the F were F♭ in measure 138 (as this occurs within *motive b,* which has a compass of a *fifth*), a linear tritone would be created with the commencing B♭. The same would be the case for F♭ in measure 140. Neither possibility is credible.

The application of these variously complementary procedures results in the reading that follows:

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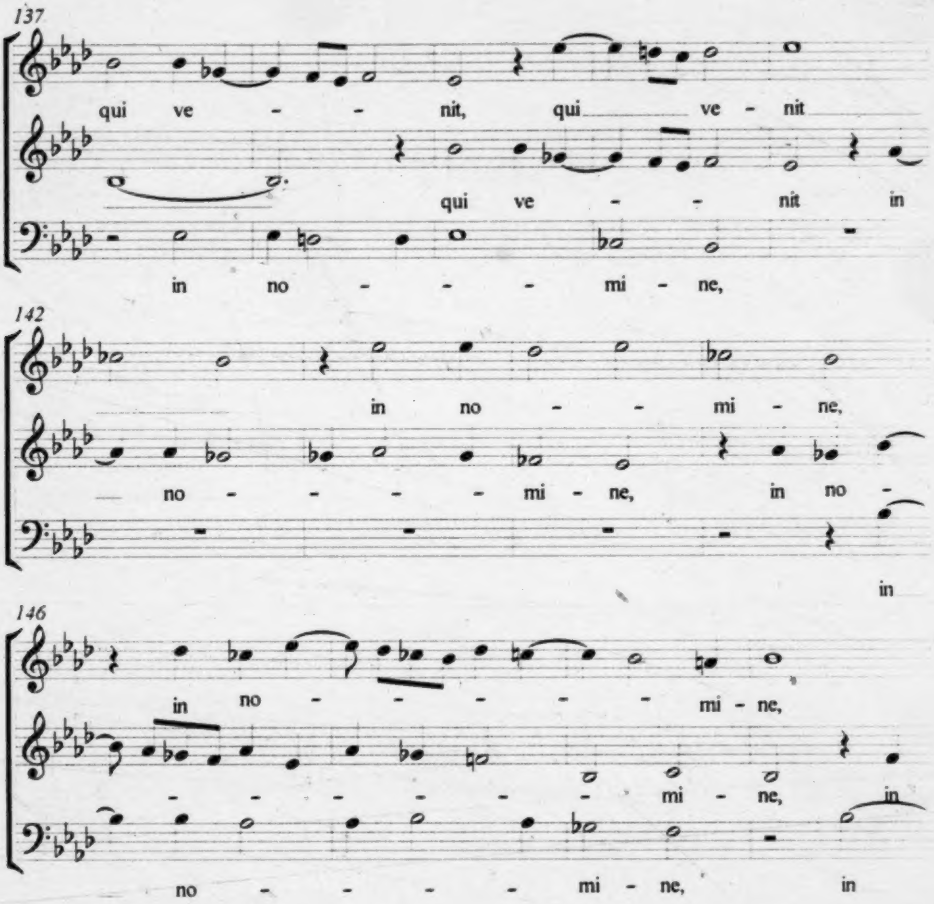
[24] The solmisation of this variant on Example 54 3a(ii) adds and extra *sol: la-la-sol-sol-la-sol-fa-mi.*

[25] Major 6th ⇒ octave.

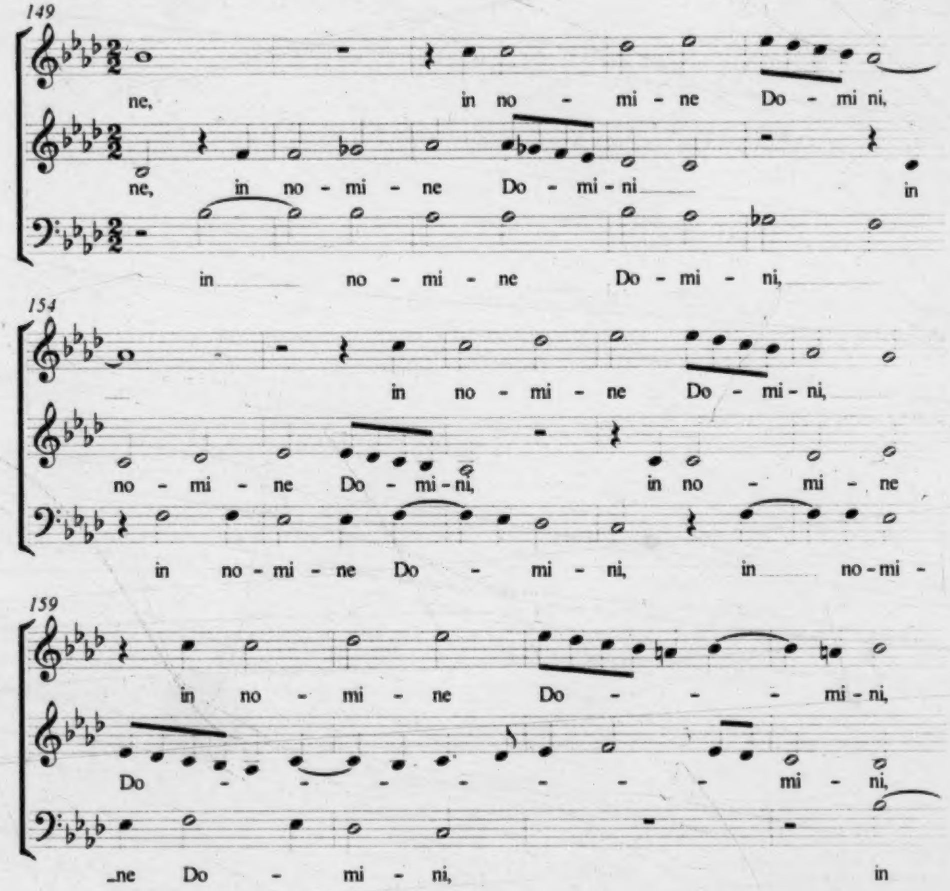
[26] However, all would still reference the same hexachordal layout.

Example 74



The section which immediately follows Example 74, above, is one in which the manipulation of an original motive above a bass line based on the *L'homme armé* melody produces one of the most beautiful passages in the whole Mass. In this passage I believe same solmisation is the correct option, but this solution leads to one of the rare instances in which the normal method of movement to the octave unison required by the concept of *causa pulchritudinis* has to be overridden. Here is the passage in what I believe should be its final form:

Example 75


149
ne,
in no - mi - ne Do - mi ni,
ne, in no - mi - ne Do - mi - ni
in
in no - mi - ne Do - mi - ni,
154
in no - mi - ne Do - mi - ni,
no - mi - ne Do - mi - ni,
in no - mi - ne
in no - mi - ne Do - mi - ni,
in no - mi -
159
in no - mi - ne Do - - - mi - ni,
Do - - - - - - - - mi - ni,
ne Do - mi - ni,
in

The imitation featured with the text, *in nomine Domini,* once more occurs at the fifth, making it probable that strict intervallic imitation was intended between the two parts involved. It becomes quickly apparent, however, that if the G♮ in the alto in measure 150 were to prevail, the solmisation of the answering motive, which would require D♮ in the soprano in measure 152, whilst it would fit very nicely with *causa pulchritudinis* in measures

150–151 and measures 154–155, would cause huge problems for other dependent parts at almost every other turn.[27]

The melodic tritone in measure 152 – admittedly passing – is also a consideration here, as it still feels awkward to sing; the temptation to sing G♭ in the descending run here is very strong. Once again it seems clearly indicated that a *recta* G♭ is required in measure 150, as well as m. 151. This one alteration thus makes the entire passage consistent in terms of the solmisation of the directly imitative soprano and alto parts, and the fact that the passage is obviously solmised as *mi-mi-fa-sol-sol-fa-mi-re-ut* in *every* other instance convinces me this is la Rue's intention here. Further support for this solution is also provided by the fact that with the similar incorporation of the *recta* G♭ in measure 153, which follows logically, both versions of the extended bass *ostinato* derived from Example 54/3b(ii) are now also solmised identically.[28]

In performance, the triple *Agnus Dei* with which the Mass ends is remarkable for the extraordinary increasing sense of calm and progressive suppression of any sense of motion which gradually seeps into the minds of both performer and audience alike. In other sections of the work, as detailed both above and below, I have argued strongly for a reading of the piece in which a variety of modal inflections are utilised. In this final movement, however, I believe an essential aspect of the communication of mood I have just described relies on the listener's perception of unity across these three sections, which is achieved by a consistent communication of modal identity only successfully achieved by the addition of several key G♭ alterations. Let us consider the evidence here.

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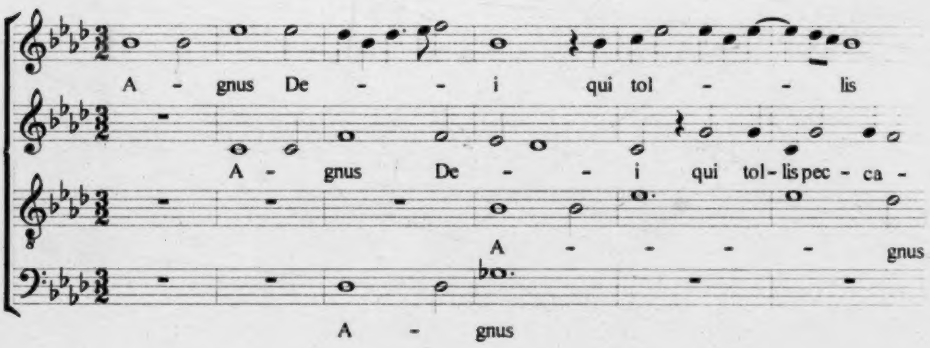
[27] For example, potential augmented double octaves with the bass in measures 156 and 160, as well as a glaring diminished fifth with the soprano in measure 158.

[28] This in itself is given greater credence when the G♭ in measures 153, 165 and 169 thereby avoids *mi contra fa* with the soprano. In the second two instances these cannot be argued away as passing, as in both instances the harmonic tritone is otherwise quite striking.

The famous 4 x mensuration canon which forms the second *Agnus* appears in partial signatures, with the *recta* G♭'s occurring in the signature of the alto and bass parts. It is interesting to note, therefore, that in two of the concordant sources the first *Agnus* also has a partial signature of Bb in the *bassus* (i.e. five flats in this transposition). At the opening of this first *Agnus* the principal source Davison uses (Brussels MS 9126) also has one of the only two signed accidentals notated by this manuscript in the entire Mass, occurring in the bass in measure 4, to correct an obvious tritone.[29] It seems quite clear, however, that both the other G's in this first *Agnus* should also be G♭'s.

In the first instance, at measure 7, this not only continues the G♭ already indicated, but also corrects an obvious *mi contra fa* with the alto. Thus by the end of measure 10, the bass has been clearly identified as remaining entirely within the soft hexachord. As the progress of the music is very similar after this point, and the bass continues to quote the *L'homme armé* melody exactly, it is difficult to consider the option of G♮ at measure 14 as credible.[30]

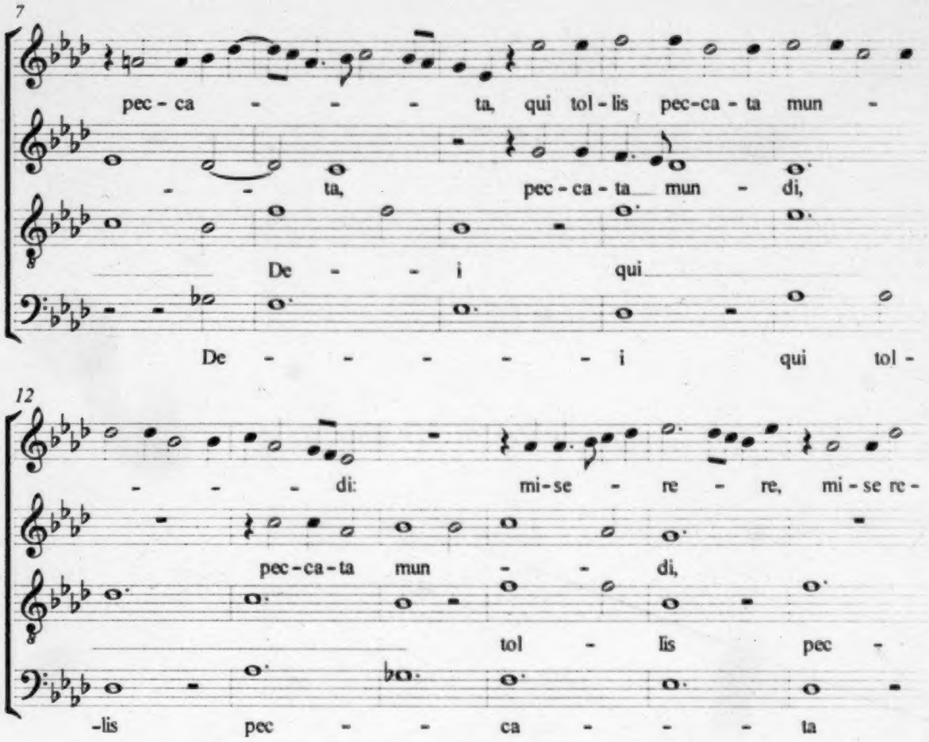
Example 76


A - gnus De - - i qui tol - - lis
A - gnus De - - i qui tol - lis pec - ca -
A - - - - - gnus
A - gnus

---

[29] Both involve *recta* alterations, i.e. soft B rather than hard B.

[30] The melodic tritone this would create with the D♭ in measure 17 is decisive here.


7
pec - ca - - - ta, qui tol - lis pec-ca - ta mun -
- - ta, pec - ca - ta mun - di,
De - - i qui
De - - - - - i qui tol -
12
- - - di: mi-se - re - re, mi - se re -
pec-ca-ta mun - - di,
tol - lis pec -
-lis pec - - ca - - - ta

It is therefore clear that a better editorial option for *Agnus I* would probably be to have a signatured flat in the bass, meaning *both* the first two *Agnus* settings would strongly identify with the hypodorian mode. Where does this leave the third *Agnus*, which springs out of these? Given the special relationship these three 'movements' seem to possess, as described above, it seems reasonable in this case to at least suspect that the third *Agnus* may well continue the modal character presented in the first two movements.

An examination of the opening section indeed reveals this to be the case, with two cases of *causa pulchritudinis* – of the type exemplified by Examples 26[dii] and [aii] - both satisfied by *recta* G♭'s, firstly in measures 56-7 (bass and soprano), and then also in measures 60-1 (bass and alto). As the first of these instances also could represent a case of *fa super la* in the bass - making the mutation into the soft hexachord for the *next* passage (commencing at measure 59) all the more seamless - this seems a more than plausible option.

From here, all the other prospective instances of the G♭ follow in similar fashion, and each instance only further strengthens the case for this alteration.[31] Thus G♭'s are independently justified for all three *Agnus* settings, and the progression from one 'movement' to the next is revealed to be all the more effective and meaningful for this.

With this consistency of mood achieved, however, a change occurs at measure 67.[32] When the soprano takes up Example 54/3a(iii) of the *L'homme armé* melody, C♮ is clearly required in measure 68,[33] and thus G♮ is obligatory in measure 70.[34] This produces somewhat of a 'tonal' reorientation which roughly coincides with the appearance of the words *dona nobis pacem.* Whether la Rue is responding directly to the overall feeling of this final text concept here is debatable, but whatever the motivation, it is clear thatG♮ is always indicated until the approach to the final cadence.[35]

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[31] For example the avoidance of the linear tritone in the alto in measure 64.

[32] See page 252.

[33] To avoid *mi contra fa* with the tenor.

[34] A fact confirmed by the perfect fifth this tied over C creates with the alto in measure 71.

[35] A typical construction of the type previously mentioned in Chapter 4(i).

CHAPTER 8

Imitative passages

In the preceding chapters, I have discussed a number of passages in which the issue of whether same solmisation should be applied has arisen, often in conjunction with other conventions relating to chromatic alteration. In this chapter, as well as further codifying my approach to these passages, I will briefly examine some additional passages from a viewpoint governed more strictly by matters of imitation and canon, as outlined in Chapter 5.

Perhaps the most interesting, yet least problematic of these, is the famous 4 x mensuration canon that is *Agnus II,* already referred to in passing in the previous chapter. It should be noted that the time signatures employed in my edition do not strictly reflect the differing rhythmic identities taken by the bass and soprano, as the original signatures of C and ₵ have both been transcribed as 2/2. From the point of view of chromatic alteration, la Rue's intention here could not be more plain, as both the alto and bass parts - which commence on E♭ - require signatures incorporating an extra flat, so that the solmisation of their parts will be identical to that of the other two parts, both of which commence on B♭ (with a signature of four flats). The effect of the mathematical manipulation of rhythmic identities in this movement – especially the effective cross-metrical relationship of the tenor part[1] – is to virtually entirely conceal any perception of meter, even *tactus*.

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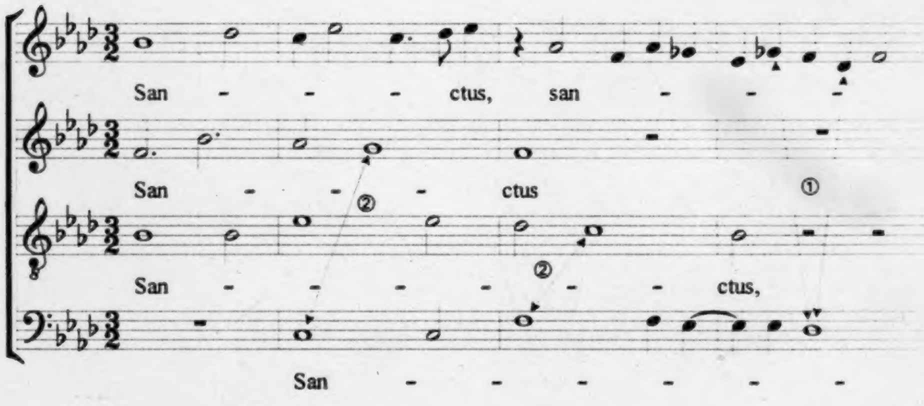
[1] In the original notation, the tenor part effectively acts in 3/2 'measures' against the 2/2 which really governs the other three parts. The tempo relationship therefore is one 'measure' of 3/2 = one 'measure' of 2/2. Rather than preserve this confusingly asynchronous visual identity, in the interests of ease of both performance and direction, I have chosen to convert the tenor part into triplets within a time signature of 2/2.

There is one other occasion in the Mass on which la Rue employs a very similar technique to the one used in *Agnus II;* combining various different rhythmic versions of the melody. The significant difference here, however, provides evidence that he was also interested in the possibilities presented by what Zarlino would have called 'free fuga.'

In the *Sanctus,* the alto, tenor and bass all commence with versions of the *L'homme armé* melody,[2] each at a different pitch, and with a different rhythmic construction. The triple imitation is continued for an extended period, until measure 11, where the alto reverts to free counterpoint with the soprano. The tenor – the true *cantus firmus* in this section – and bass, however, remain linked in some form of imitation throughout.

It is clear that same solmisation is not an issue here, however; very early on, harmonic fifth/octave relationships preclude the possibility of either the D♮ in the bass (see ① in the following example), or the G♭ and C♭ in the alto and tenor respectively, which would be needed to bring this about (see ②):[3]

Example *77*



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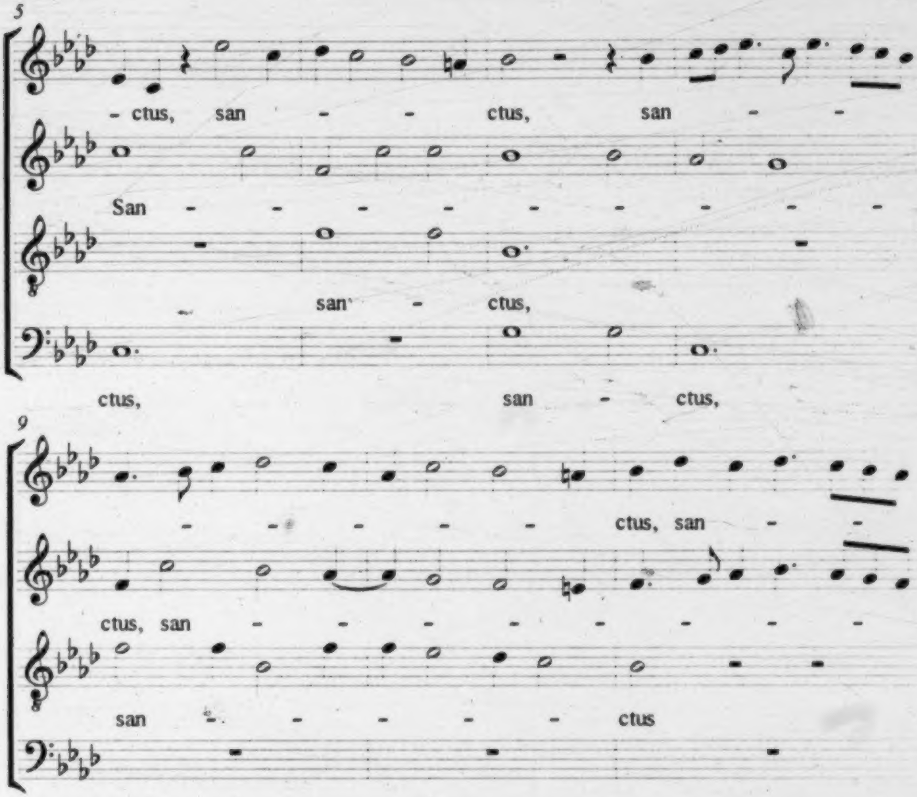
[2] Alto and tenor with Example 54/1a followed by Example 54/2a, bass with Example 54/2c.

[3] The tenor and alto lines solmise the melody in the same manner, commencing on B♭/F *re.* The bass uses a different solmisation, commencing on C *mi.*



The issue of how imitative sections are handled becomes even more interesting in cases such as Example 78, from the *Credo,* which presents a challenge from a number of viewpoints. Not least of these concerns the intervallic interpretation of a ten-fold repeated motive which carries the symbolic 'code' of the section. William Elders[4] has already observed and commented on the unique number symbolism la Rue employs at this point, serving to justify our further close scrutiny of the section setting the text: *Et incarnatus est de Spiritu Sancto ex Maria Virgine: Et homo factus est.*

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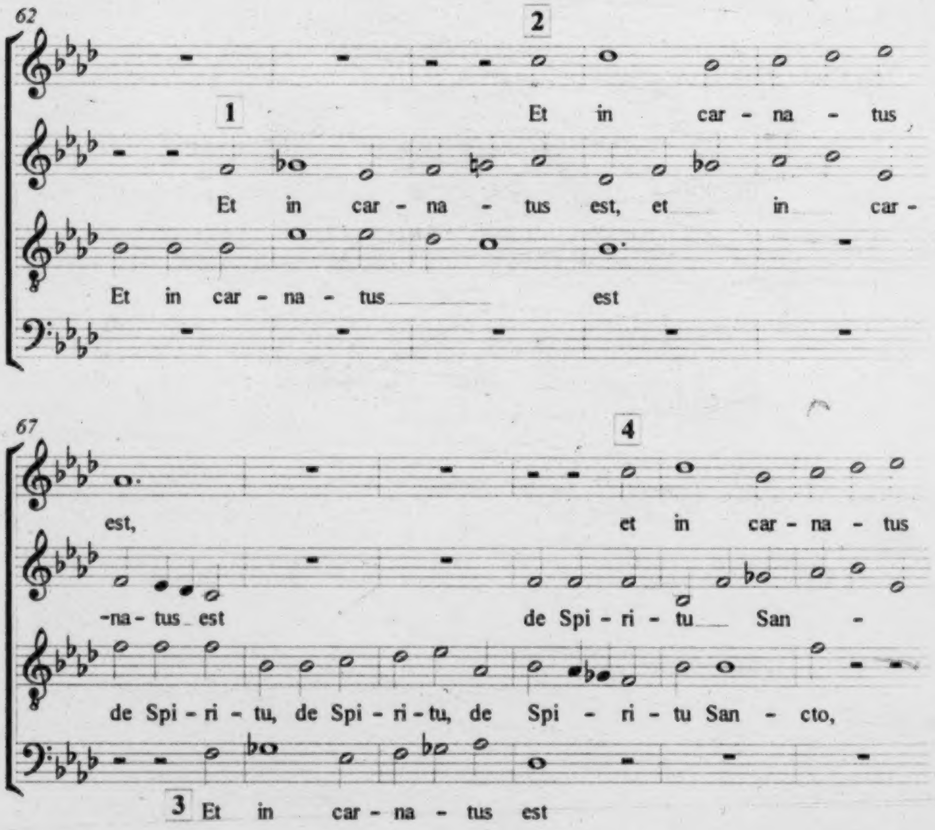
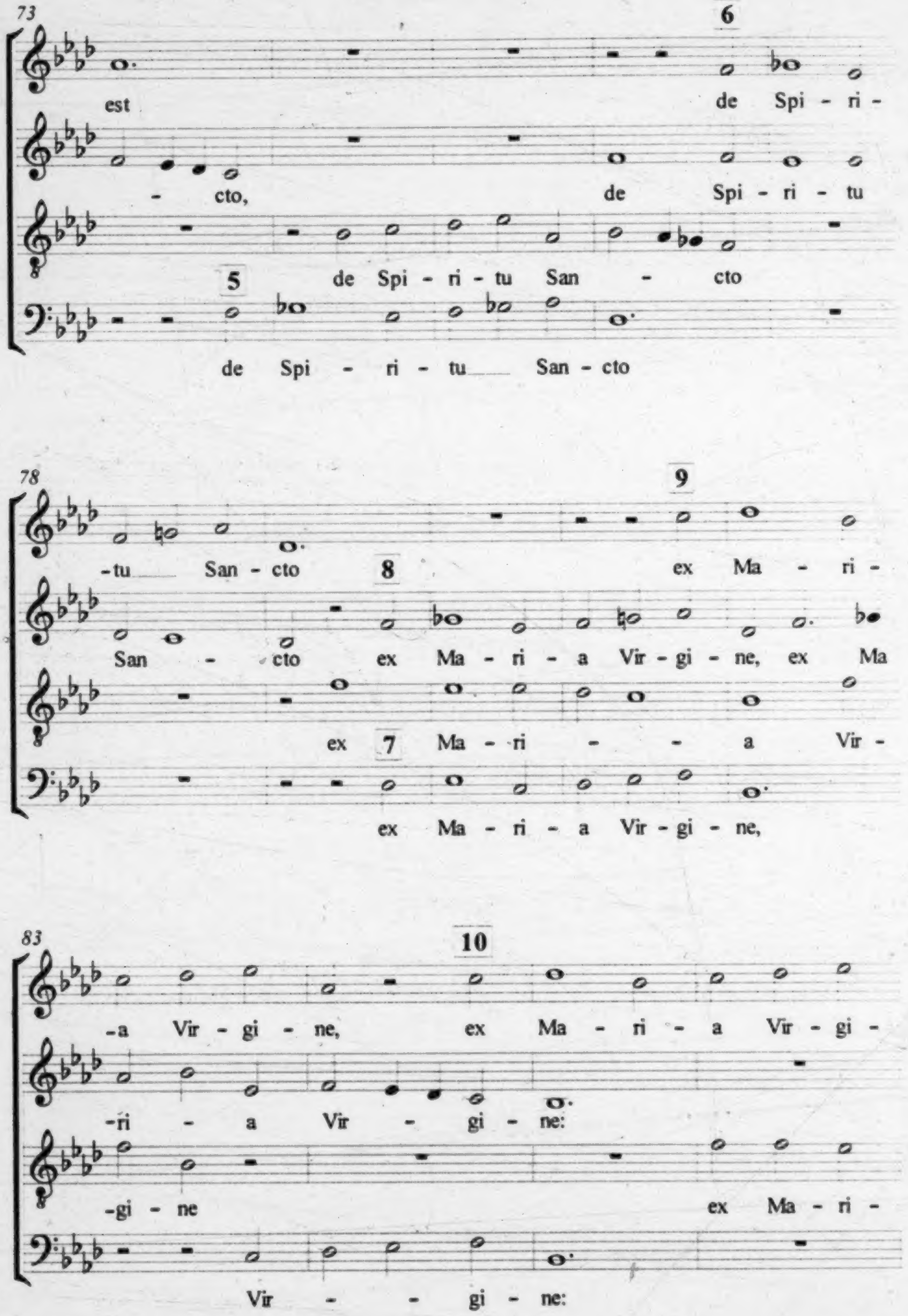
[4] William Elders, Symbolic Scores. Studies in the Music of the Renaissance, (Leiden: E.J. Brill, 1994), 66-67: "In the Greek numeral system, 'jota' – the first letter of the name 'Jesus' – signifies ten. The Greek letter 'chi', used as the first letter in the name 'Christus', is similar in form to the Roman numeral X. Since the striking repetitions of motifs [sic] occurs in sections where the liturgical text deals with Jesus Christ, there is no doubt that the composer intended the number of motives to be interpreted symbolically: the number 10 is employed as a symbol for the name of Jesus Christ. That it was indeed la Rue's intention to base these passages [there is another passage in the *Gloria* which uses the same number symbolism] on this particular number appears from the fact that the number ten is changed into eleven exactly at the point where the Credo mentions the incarnation of Christ. The symbolical 'transgression' of the number ten denotes (original) sin, and in the present context refers to the story of man's salvation through the incarnation of the Son of God. It is certainly not by accident that here the motif sounds in the lowest voice, the bassus, which traditionally is connected with Christ."

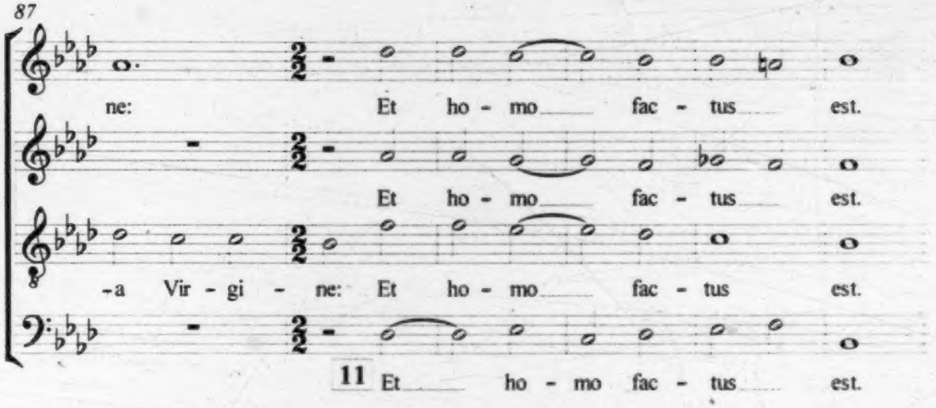
In this case I believe there is sufficient justification to render this motive with same solmisation, with a couple of key exceptions. The solution I propose is perhaps not the only credible one, but I believe it is the one which is closest to the inspiration behind the setting, and certainly one which in performance creates a powerful emotional statement.

The eleven appearances of the motive are numbered in the following example, which also gives my proposed reading of this passage:

Example 78


62
2
Et in car - na - tus
1
Et in car - na - tus est, et in car -
Et in car - na - tus est
67
4
est, et in car - na - tus
-na - tus est de Spi - ri - tu San -
de Spi - ri - tu, de Spi - ri - tu, de Spi - ri - tu San - cto,
3 Et in car - na - tus est


73
6
est de Spi - ri -
- cto, de Spi - ri - tu
5
de Spi - ri - tu San - cto
de Spi - ri - tu San - cto
78
9
-tu San - cto
8
ex Ma - ri -
San - cto ex Ma - ri - a Vir - gi - ne, ex Ma
ex
7
Ma - ri - - a Vir -
ex Ma - ri - a Vir - gi - ne,
83
10
-a Vir - gi - ne, ex Ma - ri - a Vir - gi -
-ri - a Vir - gi - ne:
-gi - ne ex Ma - ri -
Vir - - gi - ne:


87
ne:
Et ho - mo fac - tus est.
Et ho - mo fac - tus est.
-a Vir - gi - ne: Et ho - mo fac - tus est.
11
Et ho - mo fac - tus est.

This is perhaps not an interpretation which would present itself on a first reading of the music, and indeed presumes a careful preparation, perhaps even by the composer. I was first alerted to the possibility of this reading by the fact that this passage seemed to suggest that at least the distinctive opening interval of the motive should be intervallically the same for the points of imitation to sound convincing. This in turn initiated an examination of particularly the alto (mm. 62– 67) and bass parts (mm. 67–70 and 73–76), each of which supported a solmisation consistent with the version of the motive commencing a fifth higher, on C (soprano in mm. 64-67, 70-73, 81-84 and 84-87). From this point onwards, the proposed solution follows elegantly and directly. Like a number of passages already examined in Chapter 7, the sections of the alto and bass parts mentioned above present themselves strongly as candidates for *recta* incorporation of G♭'s to avoid the outline of the tritone D♭ ⇨ G. If this is indeed the case, the whole passage from measures 62-87 strongly suggests the motive should be solmised in the same manner at all times: *mi–fa–re–mi–fa–sol–ut*.

This reading poses some obvious problems, notably in measures 64 and 81, where the altered G♭'s, if allowed to stand consistent with the above solmisation, would create harmonic tritones with the tenor C. Certainly these dissonances would be aurally obvious, and therefore need to be corrected. Thus, in both cases, I suggest what really amounts to 'ficta' G♮'s[5] at *just these simultaneities* in order to correct these *mi contra fa* clashes.[6]

Of the first ten statements of the motive, this therefore accounts for nine. The only one which cannot be solmised in this manner is number 8. This is a special case, however, as it occurs in parallel 10th harmony with statement 7, meaning the bass part here cannot be solmised in the same way.[7]

Thus the passage up until measure 88 can be rendered entirely as *recta*, using soft G♭'s, with the exception of the two 'ficta' alterations noted. When one once again considers the meaning behind Elders' symbolism here, now in relation to the key *eleventh* statement of the motive (mm. 88-92), the distinctly *different* solmisation of this statement of the motive - *fa-sol-mi-fa-sol-la-re* - becomes all the more telling. This is exactly in keeping with the sort of subtle mathematical game la Rue is playing here; arguably imperceptible to all but those 'in-the-know', but no less convincing all the same.

While on the topic of number symbolism involving the use of imitation, I would like to briefly examine one other occasion on which this arises: at la Rue's depiction of the Resurrection.

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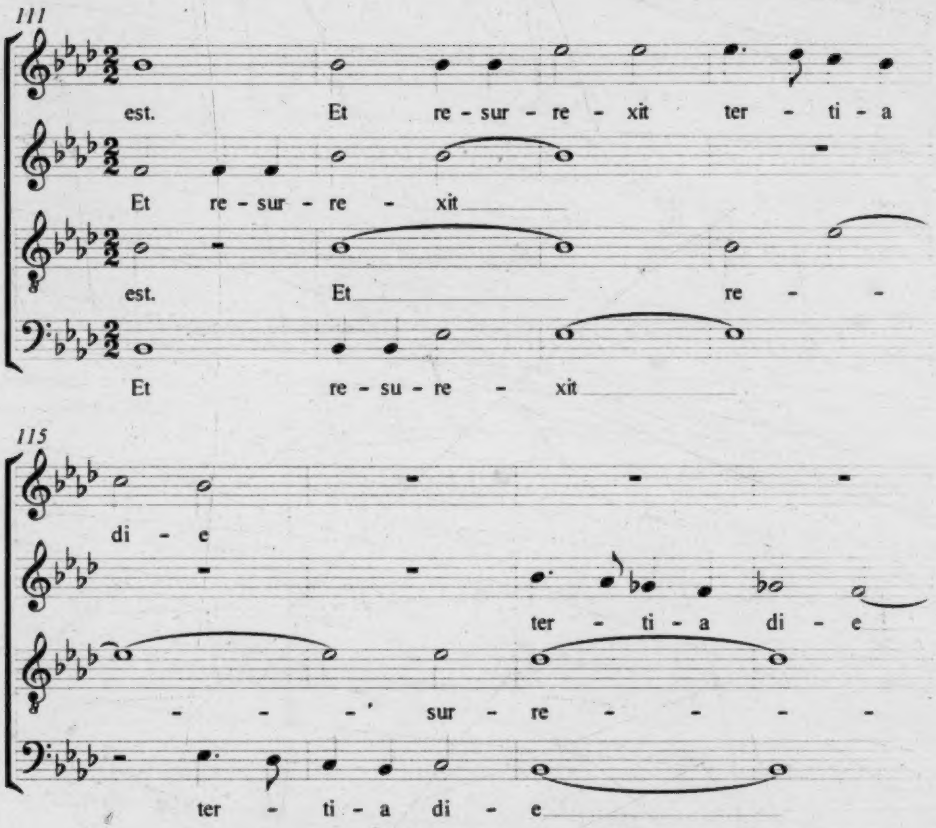
[5] This really does amount to a *ficta* alteration, rather than simply reverting to the *recta* G naturals, as the alteration really is momentary, and would present itself mentally for the singer as a ficta departure from the soft hexachord, accomplished *without* effective mutation from the soft hexachord.

[6] One other possible realisation of this passage would involve the motive being solmised in exactly the same way as with its first appearance in the alto, that is with the second and fifth notes reflecting both the soft and hard G respectively. Although this fits nicely within the concept of *causa pulchritudinis* in the approach to various perfect consonances, I was never convinced by the sound of the passage in this reading. This is no doubt due to the melodic tritone which would consistently result if this solmisation were adopted. As mentioned above, the two occasions on which I believe this solmisation should be tolerated are both to avoid *mi contra fa* with another part; to always realise the line in this way is not justified in my view.

[7] To do so would require D♮ in the bass at measure 75 (and therefore also D♮ in the tenor at m. 81). This is rendered impossible because the note immediately preceding this was D♭ in measure 76 (the separation of the two by rests is immaterial here). E♭♭ would seem even more ridiculous.

Example 79



Once again a *recta* alteration is involved, however, in this case, the significance of its placement - exactly at the third appearance of the text fragment *tertia die* - takes on perhaps greater importance. Note how the first two statements of this idea both occur on the same pitch names, whereas the final statement a fifth above/fourth below.[8] Quite often such a transposition would call for exact solmisation, and indeed without alteration this would be the case. Can it be a coincidence that la Rue contrives to synchronise this with a strongly held D♭ in the tenor *cantus firmus* at this point? The resulting harmonic tritone would surely be most obvious aurally, and I suggest it would have been altered, especially as this once again can be achieved wholly within the realm of *recta*.[9]

---

[8] Note all voices here are based on a paraphrase of Example 54/1 of the *L'homme armé* melody.

If the altered G♭'s are introduced, as I believe they should be, the result particularly draws attention to this *third* statement, revealing perhaps symbolic word painting on the composer's part. While it can never be known whether this was actually intended or not, it is easy to imagine a composer like la Rue relishing such an opportunity for intellectual subtlety.[10]

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[9] *Causa pulchritudinis* with the bass also suggests G♭ here, making the case conclusive, I feel.

[10] In many of his other Masses, la Rue uses some form of number symbolism for *three* at this point.

CHAPTER 9

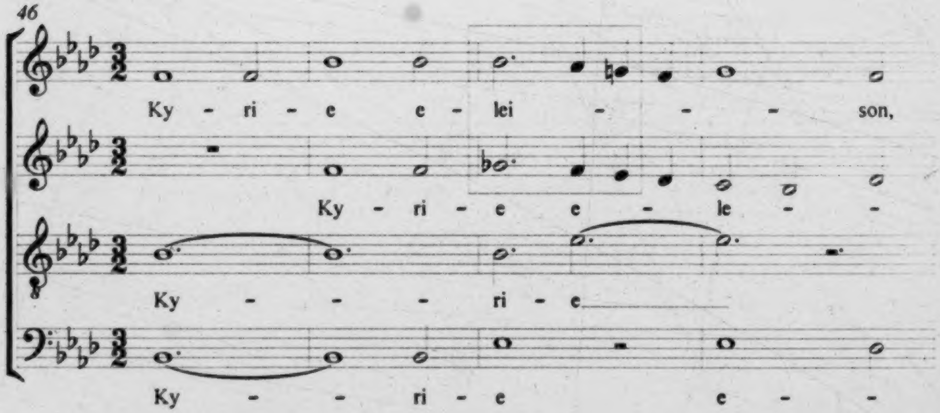
Cross-relations

The hexachordal system has the potential to produce occasional cross-relations. Within the *Missa L'homme armé* there are a number of such instances, brought about by one of two different means:

1. As a result of *recta* choices between the soft and hard 'B'

In the second *Kyrie,* the opening phrase of the unaltered alto part sounds problematic when considered with the tenor, as the major sixth created by a G♮ in measure 48 sounds immediately unconvincing, resulting as it does from an effective *major* sixth ⇨ unison progression in measure 48 which seems to represent a contradiction to the aesthetics of *causa pulchritudinis.*

Example 80

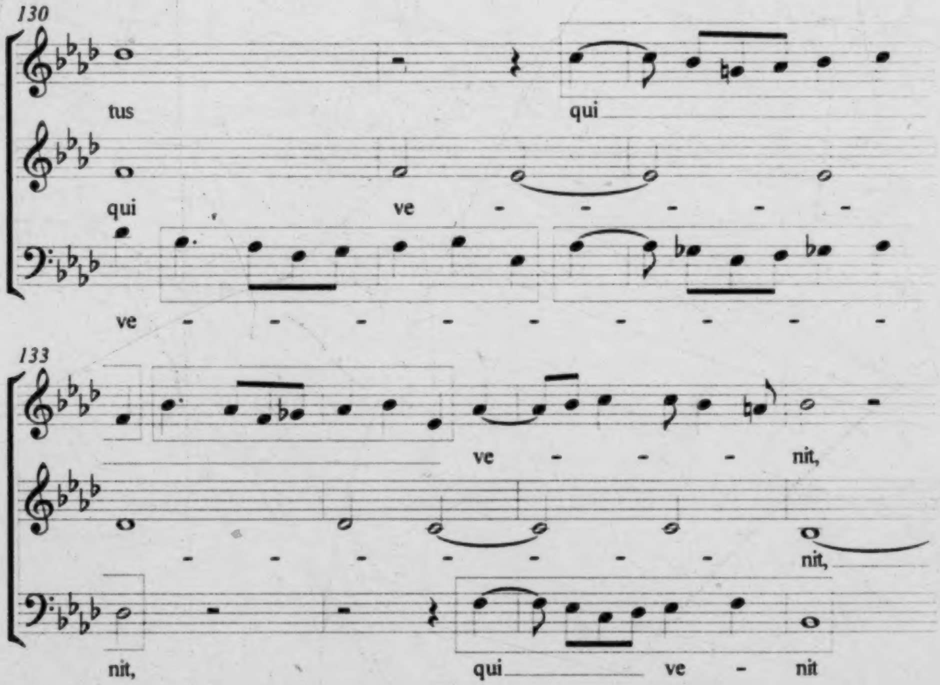


If this were the only factor to be considered here it is perhaps unlikely an alteration would be called for. A closer examination of the alto passage, however, reveals this to be a fairly straightforward example of the application of *fa super la,* which would thereby enable the same hexachord to apply for the whole passage.[1] I believe the combination of these two factors now make the alteration preferable, requiring a *recta* G♭ in measure 48 of the alto.

In the first phrase of the soprano, however, there is no reason to suggests a mutation into the soft hexachord to match the alto, as this music sits comfortably within the natural hexachord for the whole passage. The result of these contrasting hexachordal assignments places the soft and hard G in close proximity in this passage, creating a strikingly effective cross-relation which, once heard, is surely impossible to relinquish.

Another instance of this effect occurs in the *Benedictus.* On this occasion, however, the reading I have applied is derived primarily as the result of sequential considerations. Let us examine this passage in some detail:

Example 81



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[1] Various *ficta* alterations at measures 50, 55 and 62 do not change the fact that the soft hexachord is used as the basis for this entire passage.

The sequential construction of the soprano and bass parts is obvious here, but closer examination reveals the following complicating issues:

1. Is same solmisation of the sequential motive called for?
2. Why is the bass sequence interrupted and incomplete between measures 133 and 134?

In answering these questions, only one logical solution for this passage presents itself; one entirely consistent with the rest of the movement.

Let us first consider the nature of the motive itself in isolation, marked in Example 81 by boxes. The key aspects here are the overall compass of a fifth, and the rising step-wise movement of a perfect fourth within this. This structure gives rise to the last three notes of the motive transcribing a rising step followed by a falling fifth. It is clear that this rising step must be a whole step, otherwise these three notes encompass a tritone, which, more particularly, would fall on the key harmonic notes of the structure. Because of this, the G ⇨ D♭ tritone from measures 132 to 133 in the bass clearly requires alteration, and if this note is made flat, the preceding G in the same measure should also be altered.

What of the progression of the motive apart from this? If one considers the two consecutive statements which appear in imitation between the bass and soprano, the interval of imitation is a major ninth, or a transposed major second. The immediate suggestion from this is that the two parts would not solmise their parts in the same way.[2] This initial impression is supported by the fact that the four step-wise rising notes within the motive also suggest diatonic usage when manipulated as part of a sequence. Closer examination confirms the unworkability of same solmisation here, the problem revolving around whether the distance between the third and fourth notes is to be considered a whole step (that is solmised as *re-mi)* or a half step (*mi-fa)*. No satisfactory solution for a reading where all appearances of the motive are solmised in the same way can be achieved.

---

[2] As discussed in Chapter 5, imitation at the 4th, 5th and octave is conducive to same solmisation, at other intervals the imitation is not strict.

Within each *part*, however, there is a very strong case for same solmisation, as individual singers would surely have recognised the pattern as a sequential repetition, leading to the natural tendency to 'say' them in the same way each time. I have already noted the necessity to introduce G♭'s in the bass in measure 132. This results in the opening two statements of the motive in this voice being rendered identically in firstly the hard, and then the soft hexachords: *sol-fa-re-mi-fa-sol-ut*.[3]

Turning to the soprano line, in measures 131–132 the motive cannot be altered to match the G♭ of the bass in the same measure, as this would then create a melodic tritone with the C's both preceding and following. Thus, as we have already seen for the bass, once the first statement has been rendered in one solmisation - *la-sol-mi-fa-sol-la-re* - it is difficult to imagine the singer not making the mutation into the softhexachord to render the repetition of the motive in the same way.[4]

The outcome of this investigation therefore reveals the interplay of these imitative sequential motives in the soprano and bass as inevitably producing the cross-relation in measure 132; the true subject of our investigation here.[5]

What is the result of this reading of the passage?

---

[3] The mutation being effected on the E♭ *ut re* in m. 131.

[4] Mutation from the hard hexachord into the soft via an *ascending* interval within an otherwise *descending* phrase is given as regular mutation by Tinctoris (see Allaire Theory of Hexachords, 50). The mutation here would be effected, therefore, on the first F *re mi* in measure 133. It is also difficult to imagine the singer not being aware of the passing tritone with the alto if the G♭ were *not* inflected in measure 133.Despite the fact this is passing, the D♭ persists strongly both *before* and *after* the incidence of the G.

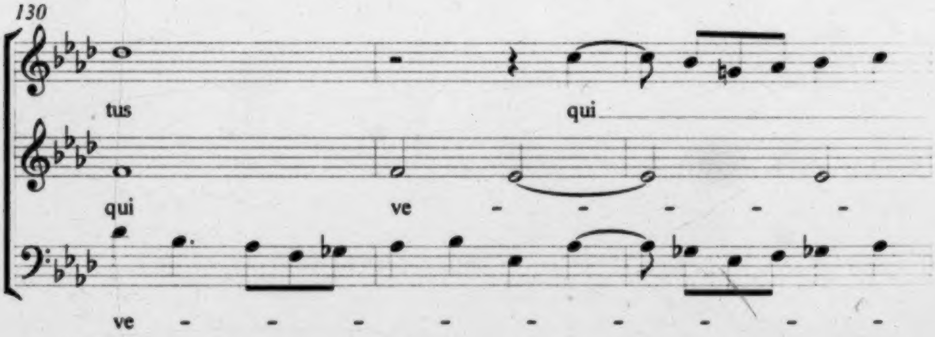
[5] The one other appearance of the motive here, in the bass from 134–136 has to be solmised in the same way as the soprano version had been previously, that is within the *natural* hexachord (on A♭), so that the cadence at measure 136 can be properly effected.

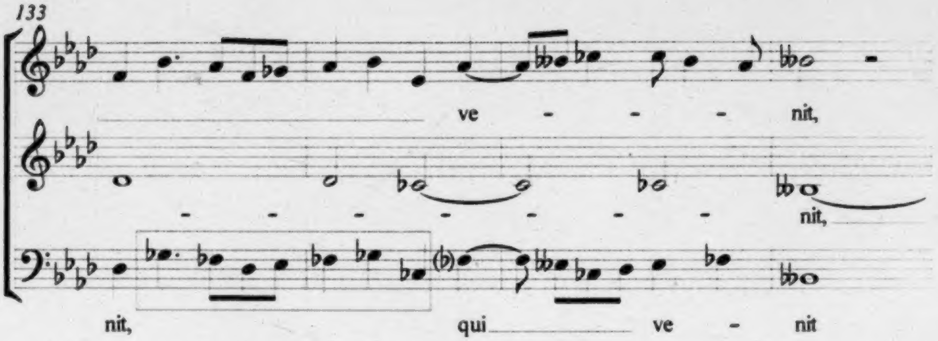
1. The motive is intervallically identical in individual parts when used in uninterrupted sequence.
2. The cross-relation between the soprano and bass is intentional in measure 132.
3. The alterations correct otherwise disruptive melodic tritones.
4. The sequence progresses by descending whole steps when complete.

I believe the argument so far establishes the validity of my reading for this passage; however, point 4 raises a particularly interesting technical question, the answer to which I believe further validates this reading. As previously mentioned, the nature of the motive itself - ending with a falling perfect fifth, and then commencing the next cycle by the use of an ascending fourth - clearly calls for cycling down repetitions of a whole tone. La Rue's awareness of this can be confirmed by considering the 'missing' statement of the motive between measures 133 and 134 in the bass part.

As Example 82 shows (see boxed portion), this 'gap' is exactly the right length for a third of four consecutive statements of the motive (commencing on G♭ - to follow the B♭ and A♭ versions), but as this would then necessitate the *following* statement at the end of measure 134 commencing on F♭, la Rue has decided to leave this statement out, as he clearly does not want to explore the far reaches of *musica ficta* here:

Example 82



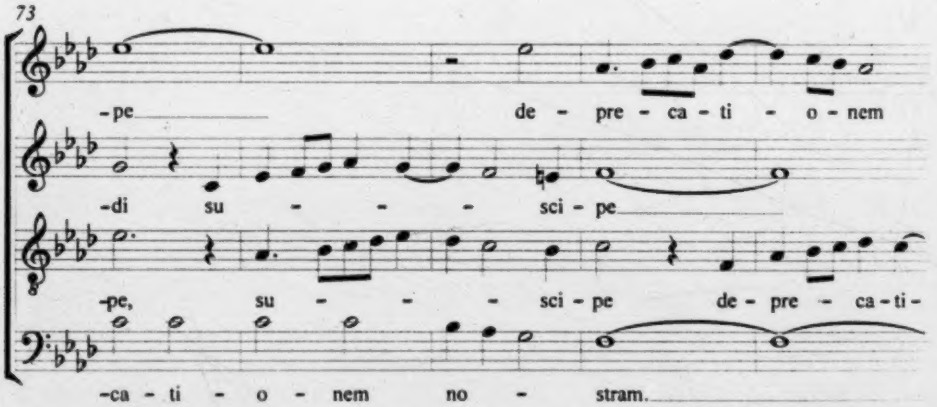


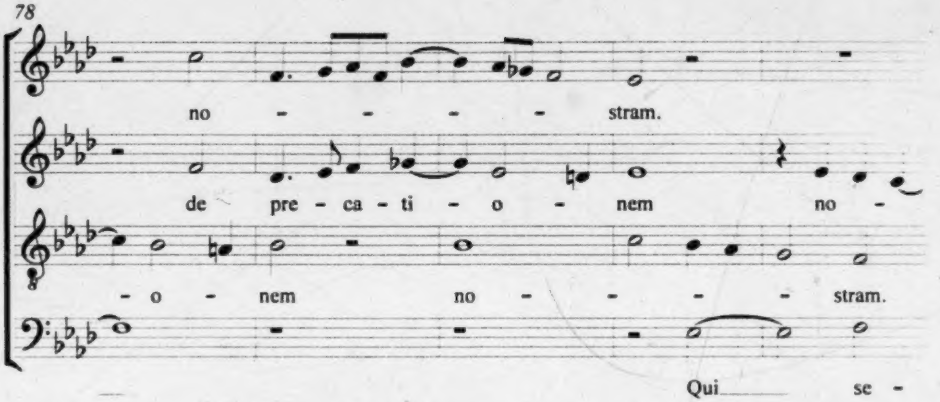
Not only does la Rue's omission of this statement now make perfect sense, but by detaching the first two (truly sequential) statements of the motive from the third - with rests in measures 133–134 - he also allows for the re-interpretation of the final bass statement in measures 134–136 to diverge from that previously used for the first two statement, now matching the soprano solmisation just heard in the 'gap.'

2. Leading tone and/or *causa pulchritudinis* progressions

Another incidence in which a cross-relation appears to be intended by the composer occurs at measure 75 of the *Gloria,* where the sub-semitone demanded by the cadence - of a structure we have already seen to be common - between the alto and the bass leaves no workable alternative to a cross-relation with the soprano E♭:

Example 83

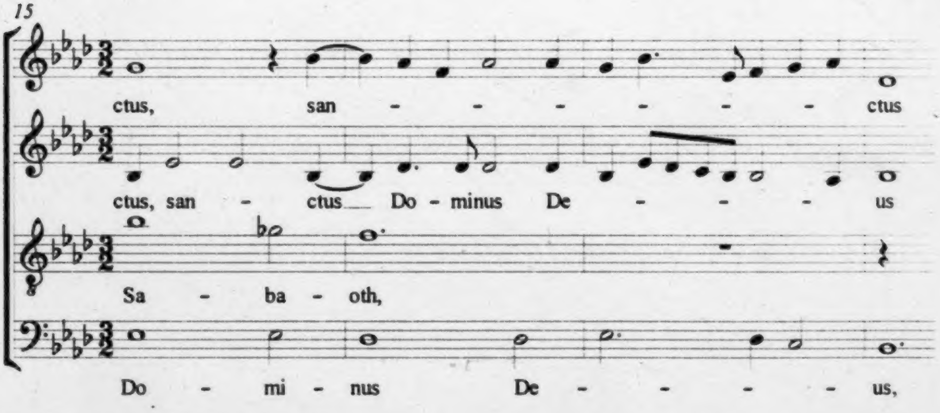

73
-pe de - pre - ca - ti - o - nem
-di su - - - sci - pe
-pe, su - - - sci - pe de - pre - ca - ti -
-ca - ti - o - nem no - stram.



It is also noticeable that the simultaneous cross-relation here is quickly accompanied by a neighboring cross-relation of the type just discussed, as in measures 78-79 the soprano is obliged to use G♮ as a result of the passage lying within the hard hexachord, while the alto must use the soft hexachord to similarly avoid the melodic tritone in measure 79.

There are a number of passages in the Mass which are potentially similar to this. In general, however, where a leading tone could be brought into simultaneous cross-relation conflict with another part, I have chosen to avoid the cross-relation if there exists sufficient evidence in favour of another solution.[6] One such example appears in the *Sanctus*:[7]

Example 84a



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[6] When such evidence is lacking, the very real possibility that the cross-relation is intended should be seriously considered.

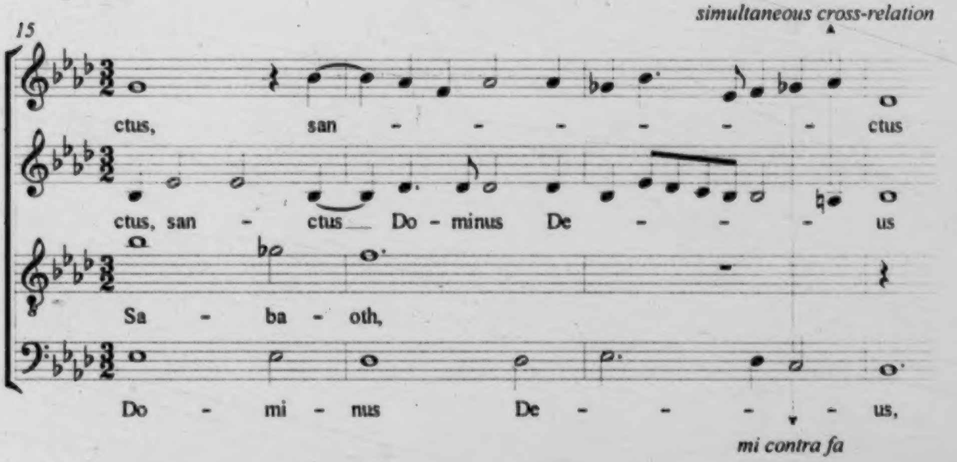
[7] I have already discussed the validity of the *recta* G♭'s in this passage.

In this form, the approach to the cadential octaves between the bass and alto suggests a raised leading tone A♮ in the alto, which would then create a simultaneous cross-relation with the soprano, whose A♭ cannot be altered on account of the perfect fifth which follows.

Another important factor points to an alternative solution for this passage, however. If the soprano in the phrase commencing on the B♭ in measure 15 is to commence in the hard hexachord (on E♭), as seems reasonable, the final D♭ in the phrase will require a mutation, logically into the immediately adjacent soft hexachord on D♭. Where should this mutation take place? Certainly this should be accomplished at least by the last G in measure 17, as its close proximity to the final D♭ strongly suggests it should be G♭. I believe the most logical place for the mutation to occur, however, is on the repeated A♭'s at the end of measure 16, which would mean that *both* G's in measure 17 would become G♭'s.

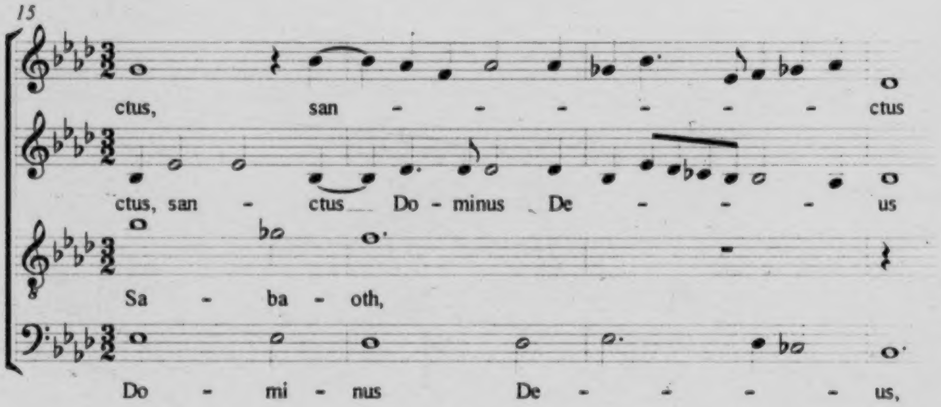
Combining the points raised in the previous two paragraphs, Example 84b shows how the passage would present itself at this early stage of our examination:

Example 84b


simultaneous cross-relation
15
ctus, san - - - - - - - ctus
ctus, san - ctus Do - minus De - - - us
Sa - ba - oth,
Do - mi - nus De - - - - us,
mi contra fa

As can be seen, this creates a glaring augmented octave between the bass and soprano at the approach to the cadence, suggesting the possibility that this progression should be of the suprasemitone variety, that is with a C♭ in the bass. As this is immediately consistent with the usage of Example 54/3b(ii) of the *L'homme armé* melody we have already seen, the alteration becomes immediately compelling, and the elimination of the cross-relation seems securely indicated here:[8]

Example 84c


15
ctus, san - - - - - - - ctus
ctus, san - ctus Do - minus De - - - us
Sa - ba - oth,
Do - mi - nus De - - - - us,

---

[8] It would be easy to imagine this section being a textbook example of a composer showing just how to manipulate part-writing to ensure his singers did *not* make a leading tone cadence, forcing them to opt instead for a *suprasemitone* progression.

CHAPTER 10

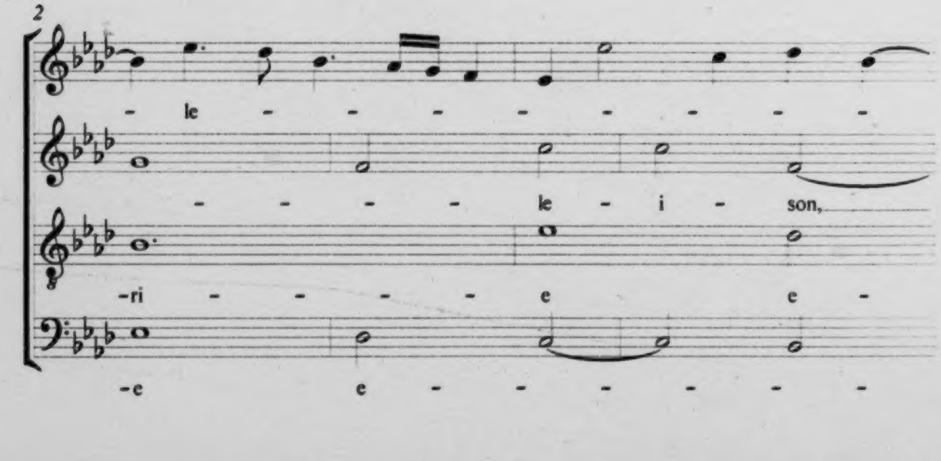
Other *ficta* alterations

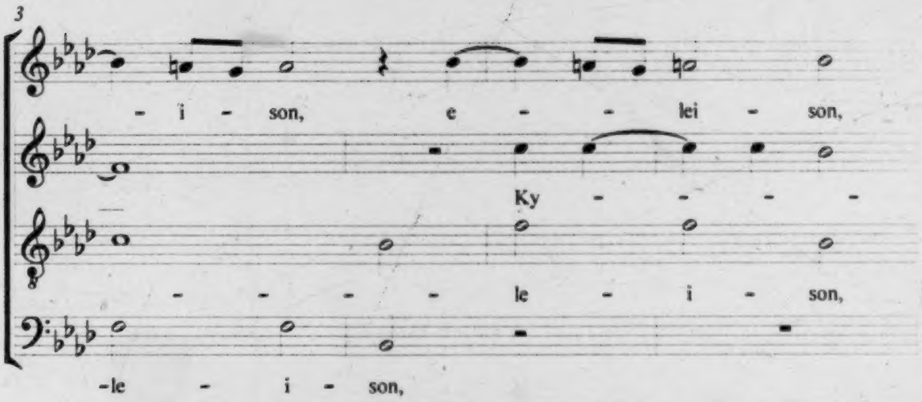
Many of the passages involving *ficta* alterations in this Mass have already been discussed in relation to one or more of the now familiar practices. The purpose of this chapter is to discuss those passages which have not yet been dealt with.

In the opening *Kyrie,* the only *ficta* alterations I have made involve the incorporation of A♮'s, both as leading tones and as the functional component of the implied *tierce de Picardie* ending.

Of these leading tone applications, one has already been discussed (see Example 28, mm. 8–9, in Chapter 4), and two others (m. 5 and mm. 6-7) are straightforward examples also supported by *causa pulchritudinis* 6th ⇨ octave movement. The remaining instance is more noteworthy, however, as it represents an example of an ornamented leading tone progression which stretches over a very long time span. Consider measures 2-3:

Example 85





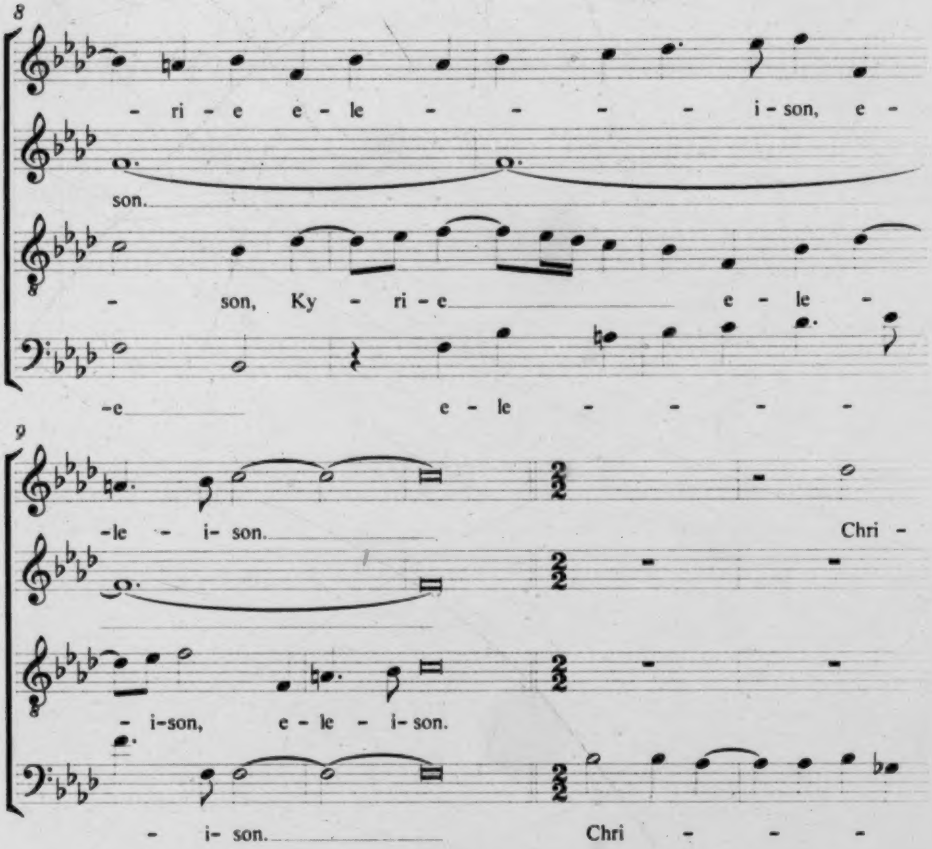
The familiar 4/3 suspension figure on which the harmonic progression commencing in measure 3 is based, once heard, is immediately repeated, with the effect that the somewhat false sense of arrival created by the rest in the soprano line is made all the more powerful by the immediate reiteration. The fact that the rest interrupts the simultaneity of the tripleB♭'s on the third half-note 'beat' of measure 3 would not prevent the soprano from recognising the passage as having the look and feel of an ornamental sub-semitone cadential progression, as discussed in Chapter 4 (iii). The fact that A♮ in both versions of this passage is also doubly supported by successive instances of *causa pulchritudinis* movement with, respectively, tenor, bass, alto and tenor,[1] leaves no choice but to make the alteration.

I have already briefly discussed the relationship of the sustained F in the tenor with what I believe should be sub-semitone alterations in measure 8 towards the end of the opening *Kyrie*. The ending of this section, which immediately follows, is also of particular interest in this regard. Consider the passage as I believe it should sound:

---

[1] *Major* 6th ⇒ octave with the tenor; *major* 10th ⇒ double octave with the bass. *Minor* 3rd ⇒ unison with the alto; *major* 3rd ⇒ octave with the tenor.

Example 86


8
- ri - e e - le - - - - i - son, e -
son.
- son, Ky - ri - e e - le -
-e e - le - - - -
9
-le - i- son. Chri -
- i-son, e - le - i- son.
- i- son. Chri - - -

As mentioned previously, the strong tendency in measure 8 for the passing thirds and sixths between this F to the A's (soprano and bass) to be made as close as possible to the 4ths and 5ths created with the following B♭'s was one reason behind my opting to introduce these A♮'s.[2] I feel the same rationale supports A♮'s in the final measure as well, in effect providing a *tierce de Picardie* ending.[3] I certainly believe the A♮'s in the measure 8 aurally anticipate this alteration, and the passage is significantly more effective in this reading. There is nothing in the part writing to prevent this, so in the light of my previous discussion of such cadences in la Rue's music (see Chapter 4(iv)), I have decided to make the alteration.

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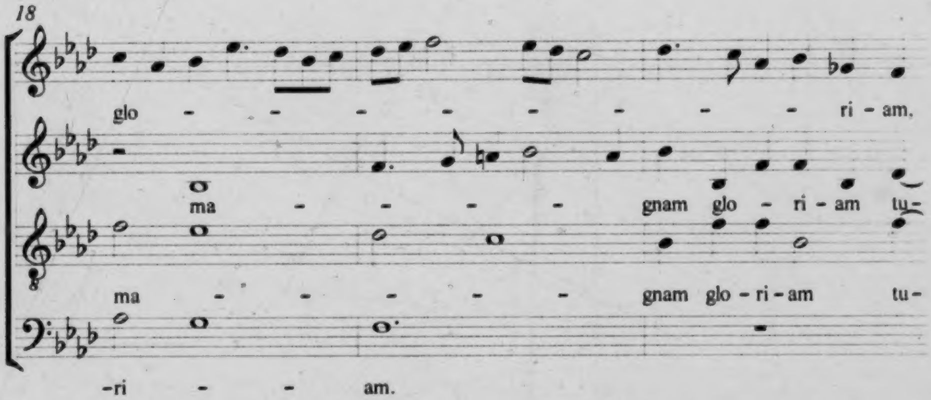
[2] As well as their leading tone functions.

[3] Despite there being no third in the final chord, the cadence is really established on the 'downbeat' of the 'measure' indicated by the tenor's arrival at the A♮ (in my edition). The fact that the tenor then progresses through a passing note to rest on the fifth of the chord in no way alters this functionality.

The next passage which has not yet received discussion occurs in the *Gloria*, and is yet another example of an ornamental leading tone progression, this time where the cadential tone is approached from below:

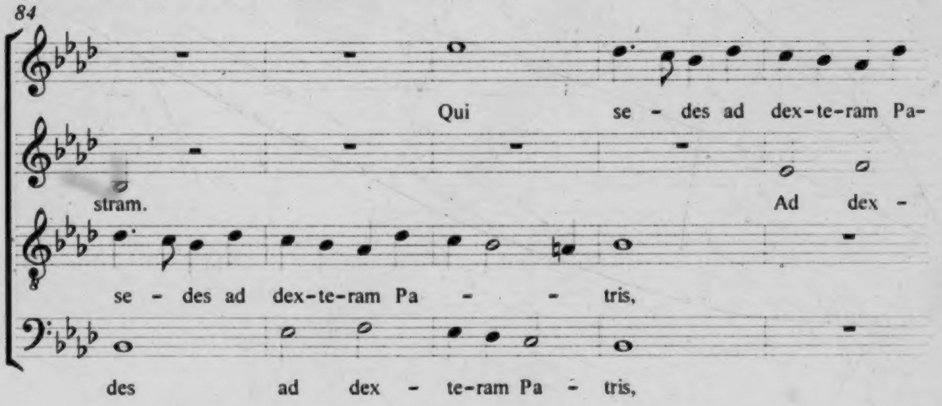
Example 87


18
glo - - - - - - - - - ri - am.
ma - - - - gnam glo - ri - am tu-
ma - - - - - gnam glo - ri - am tu-
-ri - - am.

The alto in measure 19 approaches the B♭ suspension from beneath; however, this is just one other variation on the leading tone cadence used to highlight the suspension B♭ itself. The underlying harmony is still the same for the whole 'measure', so both A♭'s should be raised.

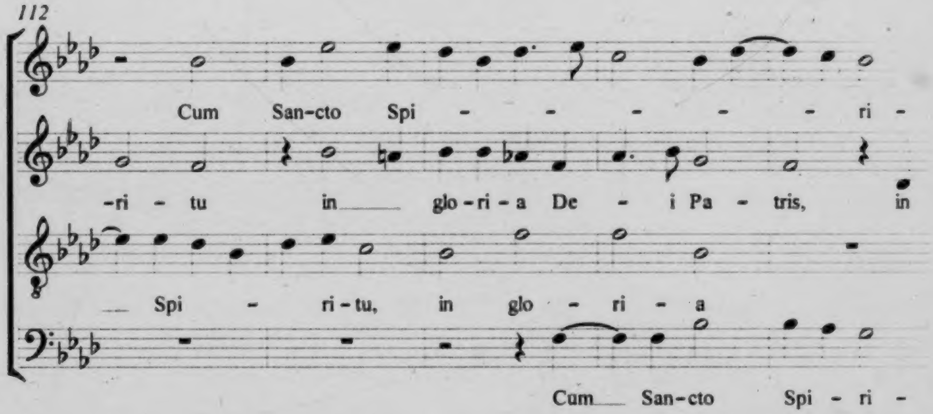
If cadences of this type are very common in the Mass, so too are those of the variety discussed in Examples 14-16 of Chapter 4(i), in which the harmonic tritone is tolerated. Even within this category, however, there is some variation, normally involving the handling of the suspension. I will consider two such examples, the first of which occurs in the central section of the *Gloria:*

Example 88


84
Qui se - des ad dex-te-ram Pa-
stram. Ad dex -
se - des ad dex-te-ram Pa - - tris,
des ad dex - te-ram Pa - tris,

The second is from the final part of the same movement:

Example 89

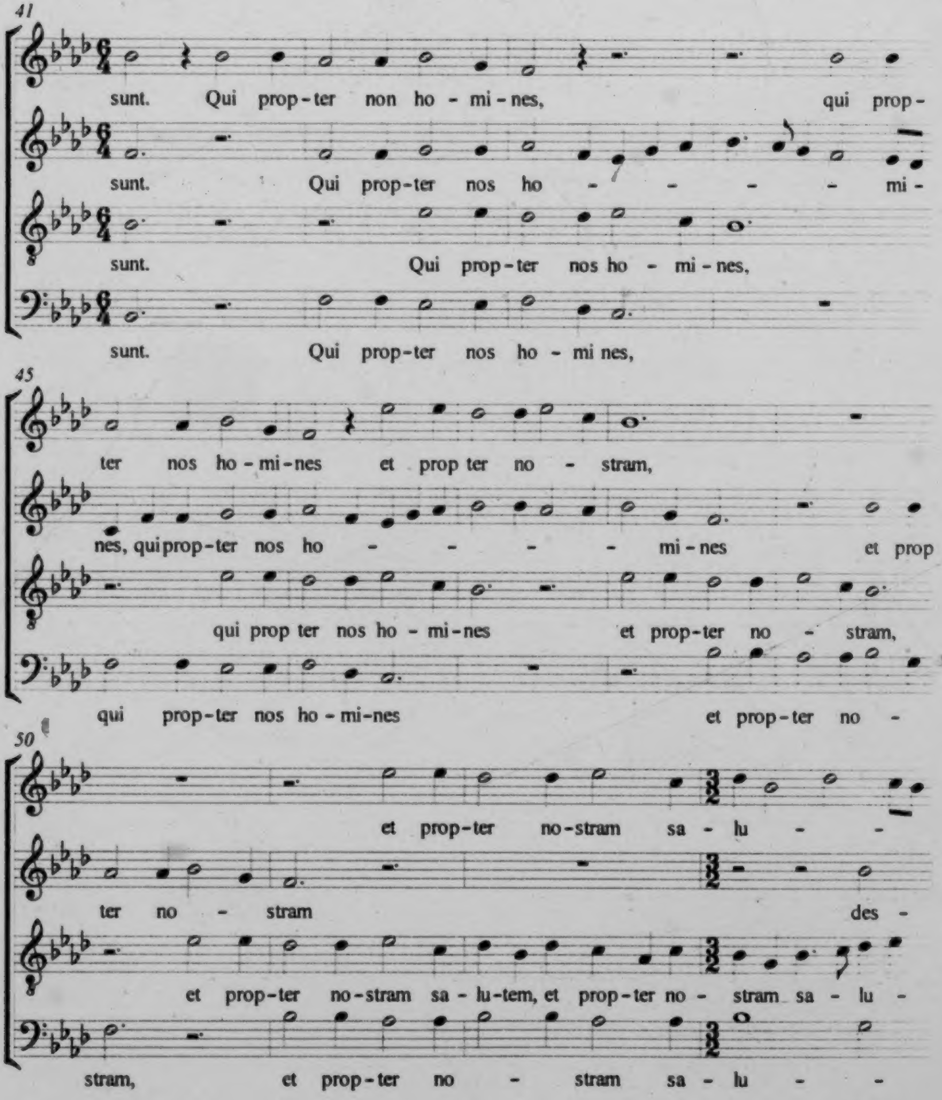

112
Cum San-cto Spi - - - - - ri -
-ri - tu in glo-ri-a De - i Pa - tris, in
Spi - ri-tu, in glo - ri - a
Cum San-cto Spi - ri -

Both these examples involve suspensions, both feature only three voices, and both also incorporate the harmonic tritone we have already seen to be encouraged in cadences of this type. I include both here because the first is a clear case where the two functional voices make a strong cadential move towards the strong *tactus* of measure 87, whereas in the second example, the two functional parts are not really cadential at all.

As in my earlier discussion of this issue, I contend that singers would likely have recognised the second progression as being of the same type as the first, and would have been so attuned to its distinctive aural signature, that alteration would have been carried out as a matter of course. Certainly my experience as both singer and conductor of this music supports this; one becomes highly sensitive to the distinctive *sound* of such passages, to the extent that one finds even fleeting 'uncorrected' examples such as this quite disconcerting.

A passage which presents a more difficult challenge with respect to the application of *ficta* occurs in the *Credo*. Here is the passage unaltered:

Example 90


41
sunt. Qui prop-ter non ho - mi - nes, qui prop-
sunt. Qui prop-ter nos ho - - - - - mi -
sunt. Qui prop-ter nos ho - mi - nes,
sunt. Qui prop-ter nos ho - mi nes,
45
ter nos ho - mi - nes et prop ter no - stram,
nes, qui prop-ter nos ho - - - - mi - nes et prop
qui prop ter nos ho - mi - nes et prop-ter no - stram,
qui prop-ter nos ho - mi - nes et prop-ter no -
50
et prop-ter no-stram sa - lu - -
ter no - stram des -
et prop-ter no-stram sa - lu-tem, et prop-ter no - stram sa - lu -
stram, et prop-ter no - stram sa - lu - -

This whole passage is driven by a motive drawn from the *L'homme armé* melody corresponding to measures 5-8 of Example 54/3. As has been observed on a number of previous occasions, there are two versions of this motive, Example 54/3(a), which features a G♮ in measure 7, and Example 54/3(b), which features G♭. As the motive is imitated at the interval of a fifth both above and below,[4] it is impossible for this whole passage to consistently present the motive with same solmisation. The issue here is which version should take preference, since both, including the seemingly non-diatonic version – with the soft hexachord G♭ – are available as *recta* choices. I have chosen to use the version presented in Example 54/3(b) for this whole passage, for the following reasons:

1. The initial imitation (mm. 41-43) is set up between the soprano and bass at the interval of a fifth (down two octaves), the second most likely interval to feature same solmisation. It is impossible to alter the D♭ in the bass, so I have decided to introduce G♭ in the soprano
2. The bass and soprano lines consistently arrive at octaves - at measures 43, 46 and 53[5] - which need to be approached by *minor* 10ths/3rds. The only way this is possible is via G♭'s in the first two instances, and C♭ in the third.[6]

These points are mutually consistent, requiring the same alterations to be made in each case. Once these alterations are accepted, it is a straightforward matter to allow the same procedures to operate over the course of the whole passage. Thus the following apply:

1. When the point of imitation changes in measure 46, and the alto follows the soprano: G♭'s again should occur.

---

[4] Allowing for octave displacement.

[5] At 53 the B♭ octave is ornamented for a half-beat by the D♭ in the soprano. This does not change the validity of the necessity to see the movement *prior* to this as consistent with *causa pulchritudinis*.

[6] The E♭'s and A♭'s in these respective cases cannot be sharpened as this would then destroy the identification of the motive with the *L'homme armé* melody.

2. The third ⇨ unison between the tenor and bass in measure 49 must be *minor*, requiring C♭ in the tenor. This alteration then continues to influence the next four measures.

Throughout, these alterations enable the passage as a whole to remain consistent with progressions detailed in Example 26. Combined with the fact that the individual lines are also more easily understood in this way, I believe this reading to be superior to the unaltered version, despite the outline of a melodic tritone in the alto in measure 45.

The whole passage can thus be seen to function within an altered modal framework reflecting firstly transposed hypodorian (mm. 41-47), then transposed phrygian (mm. 47-54); *recta* G♭'s therefore *always* present, and *ficta* C♭ coming into play a measure 47 to effect the change to the phrygian. I believe this is consistent with la Rue's approach throughout the work. That this particular section presents difficulties is because it is the only passage in the whole work to use Example 54/3 in such close, rapid-fire imitation at such interval displacement.

Discussion of the modal identity of this section brings me to the last *ficta* related aspect of the passage which requires comment: the approach to the B♭ octaves in measures 44 and 47. In both cases C♭ in the tenor is made impossible by the need to avoid a diminished octave with the bass, thus I have altered the step-wise ascending alto part before each of these to outline a leading tone progression; requiring both G♮[7] and A♮. Here then is the whole passage as I believe it should sound:

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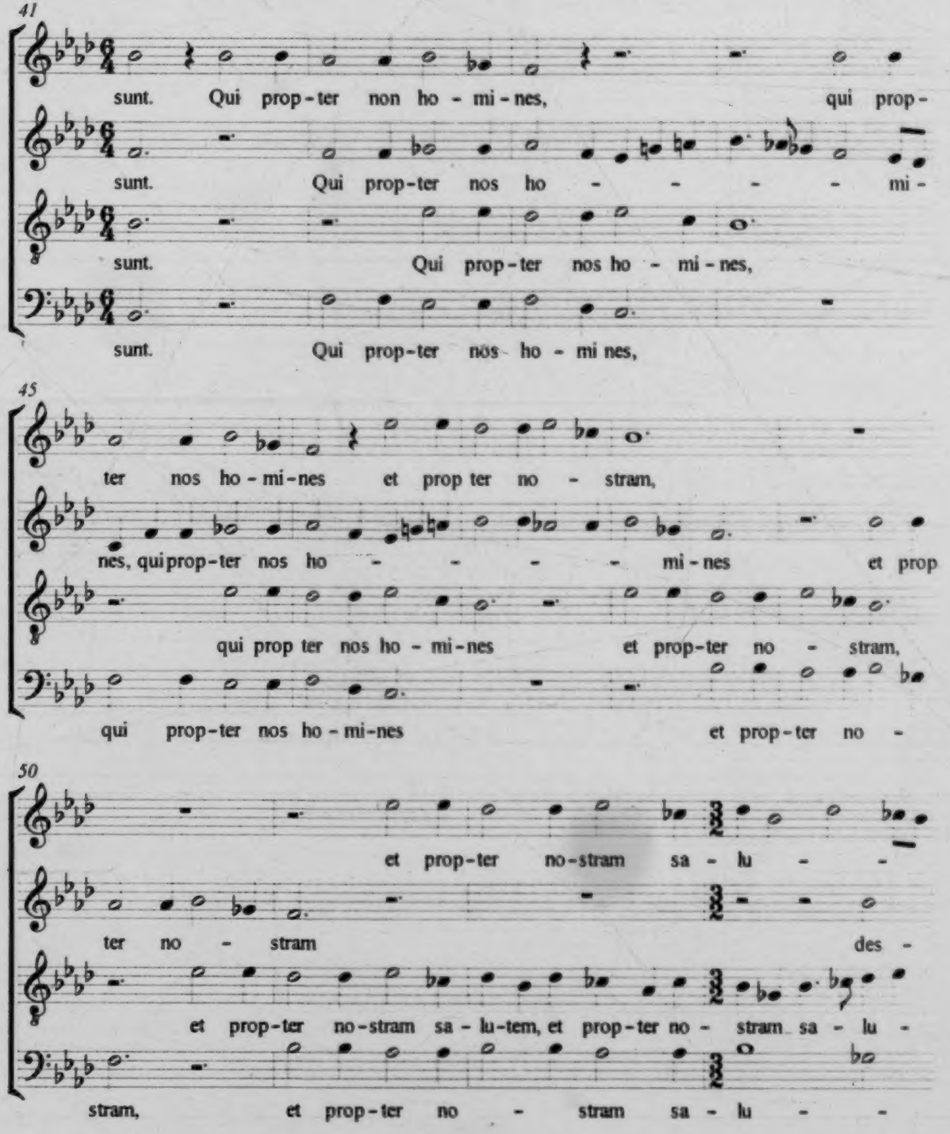
[7] The modal hypodorian/phrygian character that pervaded the music at this point makes even the G♮ - which is *recta – sound* like a *ficta* alteration.

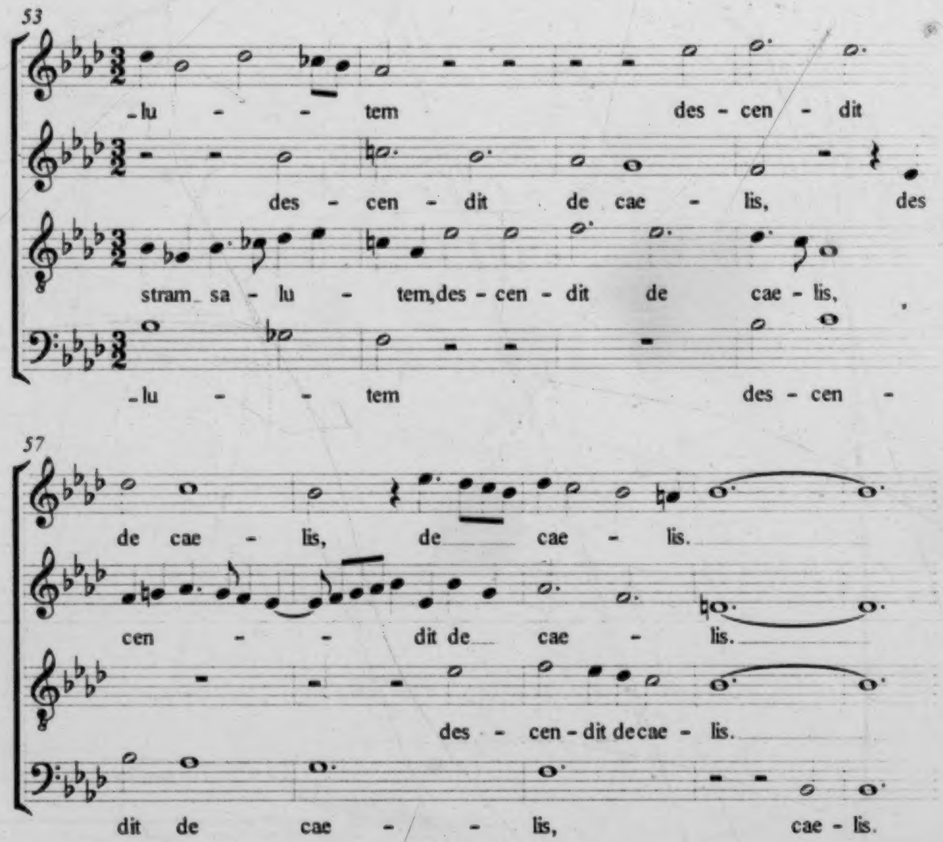
Example 91


41
sunt. Qui prop - ter non ho - mi - nes, qui prop -
sunt. Qui prop - ter nos ho - - - - mi -
sunt. Qui prop - ter nos ho - mi - nes,
sunt. Qui prop - ter nos ho - mi nes,
45
ter nos ho - mi - nes et prop ter no - stram,
nes, qui prop - ter nos ho - - - - mi - nes et prop
qui prop ter nos ho - mi - nes et prop - ter no - stram,
qui prop - ter nos ho - mi - nes et prop - ter no -
50
et prop - ter no - stram sa - lu - -
ter no - stram des -
et prop - ter no - stram sa - lu - tem, et prop - ter no - stram sa - lu -
stram, et prop - ter no - stram sa - lu - -

For me, the final clinching argument in favour of my reading of the passage shown above comes as this passage moves into the next, with the appearance of the key text concept *descendit de caelis* (m. 53). Given the modal identity I have suggested prevails up until this point, this new idea now is projected with extraordinary power and impact.

It has long been held in some circles that music of this period did not ever indulge in specific word-painting, at least in the manner to be observed later in the 16th century. This is a misconception. Consider the passage with which la Rue completes this extended section:

Example 92


53
-lu - - tem des - cen - dit
des - cen - dit de cae - lis, des
stram_ sa - lu - tem,des - cen - dit de cae - lis,
-lu - - tem des - cen -
57
de cae - lis, de cae - lis.
cen - - dit de cae - lis.
des - cen - dit de cae - lis.
dit de cae - - lis, cae - lis.

It simply cannot be denied that la Rue's purpose here is to specifically and obviously depict the concept of 'descendit de caelis' in terms of direct word-painting, with a motive drawn from the Example 54/3(ii) of the *L'homme armé melody.* The way in which these entries are layered one on top of the other, almost as if cascading down from heaven – firstly alto (m. 53), then soprano (m. 55), then bass (m. 56), and finally tenor (m. 58)[8] - is surely evidence the most hardened skeptic would be sorely pressed to refute.

Given this text-driven conception, la Rue's manipulation of two other factors powerfully supports his imagery here. It is surely no coincidence that the transition which is forced by the part writing at measure 54 looks immediately upwards, with the original mode re-established *exactly* at the appearance of the new words. This in itself strongly supports the reading I have advocated for the passage which immediately preceded this, but it is not the only significant alteration which coincides with the change in text concept here.

Given what we know of the original *L'homme armé* melody – it is always transcribed in compound time – the whole of the *Qui propter* section reflects this rhythmic character, presenting itself contrary to the simple-triple meter indicated by the prevailing signature.[9] That this rhythmic identity clearly reverts back to that suggested by the signature - again *exactly* at measure 53 (with the transition to the new words) - is unmistakable.

All these factors support my belief that la Rue is attempting something special in the way of text illumination here, and I believe they present ample justification for this reading of the entire passage, which is thus revealed as a particularly powerful, even visionary setting.

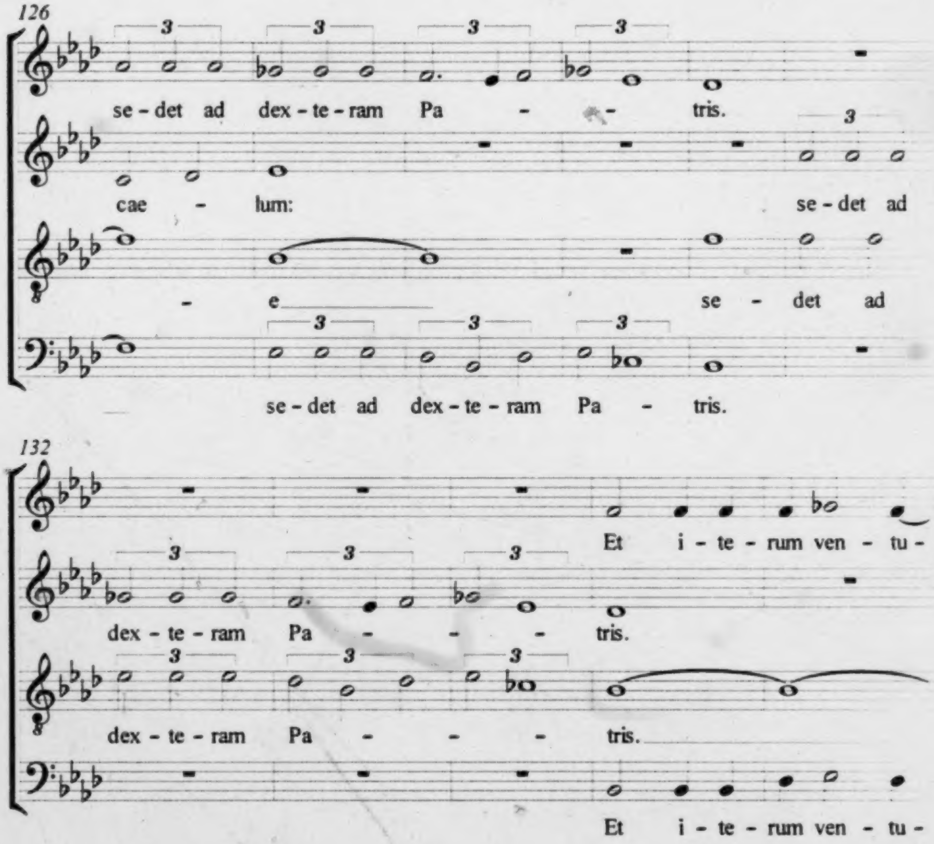
As previously discussed in Chapter 7, I have used predominantly *recta* G♭'s in the extended section from measures 93 through 191 in the *Credo*. Despite the generally prevailing G♭'s in this section, I believe both C♮ and C♭ are possible in measures 129 and 134. When in doubt in a passage such as this it may seem prudent not to intervene, but to me C♮ sounds wrong, and in such a case it is probably more in keeping with what we know of Renaissance practice to trust an aural judgement. In this instance I am sure the uneasy co-existence of both G♭ and C♮ in the same measure, despite the fact that they do not directly clash, is the reason C♮ fails to convince. I have therefore used a *ficta* C♭:[10]

---

[8] The tenor part in measures 54-5 is also closely related, as is the soprano in measures 58-9.

[9] For this reason my edition changes the organisation of the *tactus* here to fit in with what is certainly a compound-duple feeling from measure 41 right through to measure 53. The original does not have a signature change at measure 41, remaining in 3/2.

Example 93

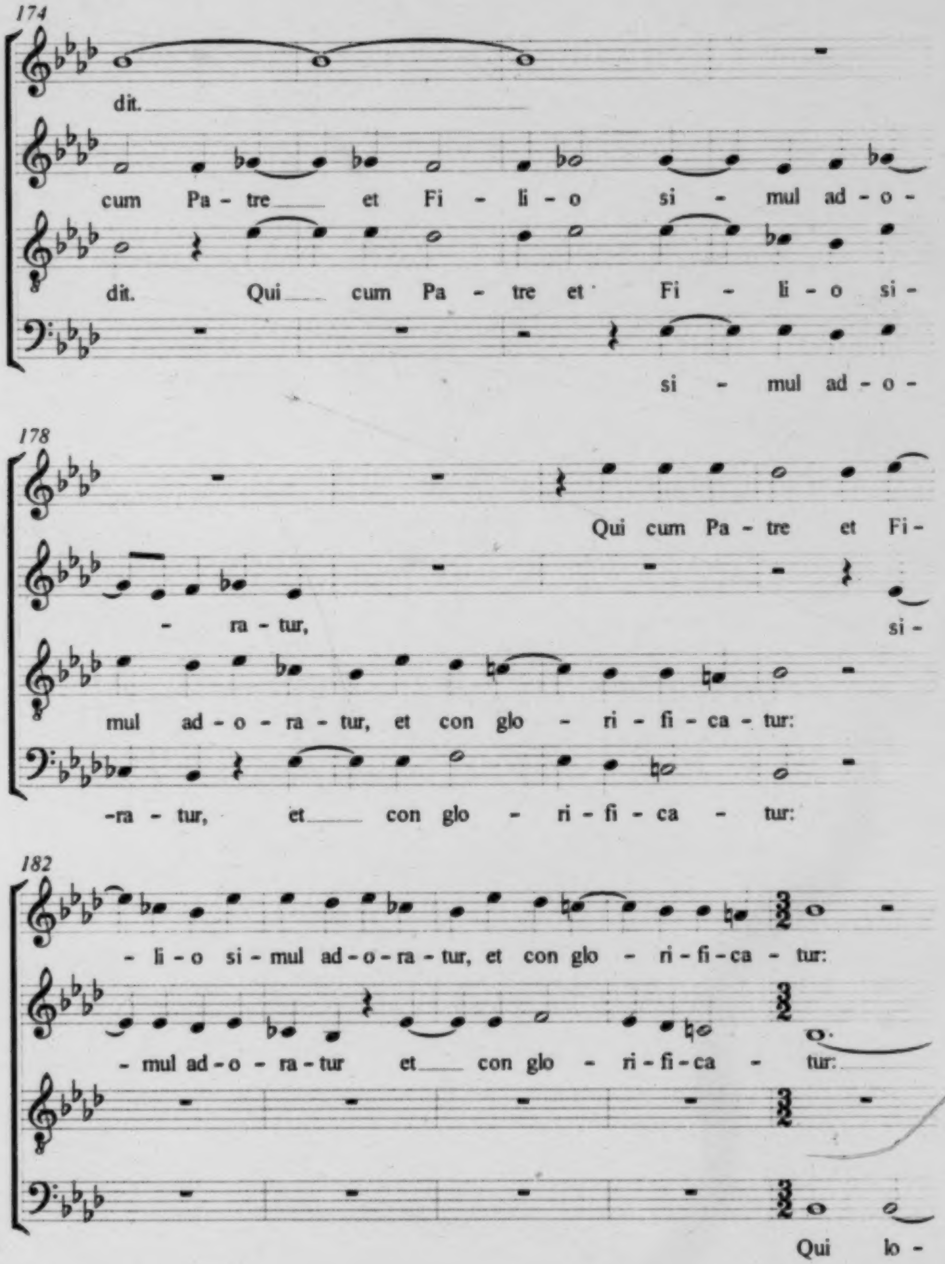

126
se - det ad dex - te - ram Pa - - tris.
cae - lum: se - det ad
- e se - det ad
se - det ad dex - te - ram Pa - tris.
132
Et i - te - rum ven - tu -
dex - te - ram Pa - - - tris.
dex - te - ram Pa - - - tris.
Et i - te - rum ven - tu -
3

Very much the same arguments apply in one other passage a little later in this same section. In this passage, however, the issue is slightly more complicated, as two similar phrases in which I feel C♭'s are required are both followed by phrases in which C♮ is certainly obligatory. Here is the passage as I feel it should sound:

---

[10] Which identifies the bass part with Example 54/2c at this point, rather than 2a.

Example 94


174
dit.
cum Pa - tre et Fi - li - o si - mul ad - o -
dit. Qui cum Pa - tre et Fi - li - o si -
si - mul ad - o -
178
Qui cum Pa - tre et Fi -
- ra - tur, si -
mul ad - o - ra - tur, et con glo - ri - fi - ca - tur:
-ra - tur, et con glo - ri - fi - ca - tur:
182
- li - o si - mul ad - o - ra - tur, et con glo - ri - fi - ca - tur:
- mul ad - o - ra - tur et con glo - ri - fi - ca - tur:
Qui lo -

In this example, as has been the case on a number of previous occasions, the held B♭ in the soprano in measures 174-176 suggests G♭ is required in the alto so that the constantly reiterated harmony occurring as a result of the alto's oscillation between G♭ and F produces a *major* third ⇒ perfect fourth juxtaposition. Within this context, C♭'s in the tenor in measures 177 and 178, as well as the bass in m. 178, are much more convincing than C♮'s, for the following reasons:

1. The tritone relationship G♭ ⇒ C is avoided.
2. The (admittedly passing) approaches to the perfect fifths between the alto and tenor (m. 177) and tenor and bass (m. 179) are made via the expanding *major* third, and the contracting *minor* sixth respectively.[11]
3. The version of Example 54/3(i) used by the tenor (and imitated in rhythmically altered form by the bass from in mm. 176-178) is consistent with what has been seen before within this section.

When the bass moves to a version of the chanson melody reflected by Example 54/3(ii), however, continued C♭'s would also require F♭, and as this section still functions within the modal 'tonic' of B♭, this would be difficult to justify. Thus the cadential construction in measures 180-181 must be of the leading tone variety, on B♭.

In the measures which immediately follow (181-186), la Rue simply re-states this same material in altered scoring – a technique typical of his style. I have therefore applied the same alterations to these measures.[12]

The modal identity of motives gleaned from the *L'homme armé* melody is also significant in the *Sanctus*. In Chapter 7, I discussed my decision to utilise *recta* G♭'s in the soprano at the opening of this movement. Later on in this movement there are a number of *ficta* issues which also need to be addressed, but before this can be done a number of observations about the movement as a whole would be useful.

---

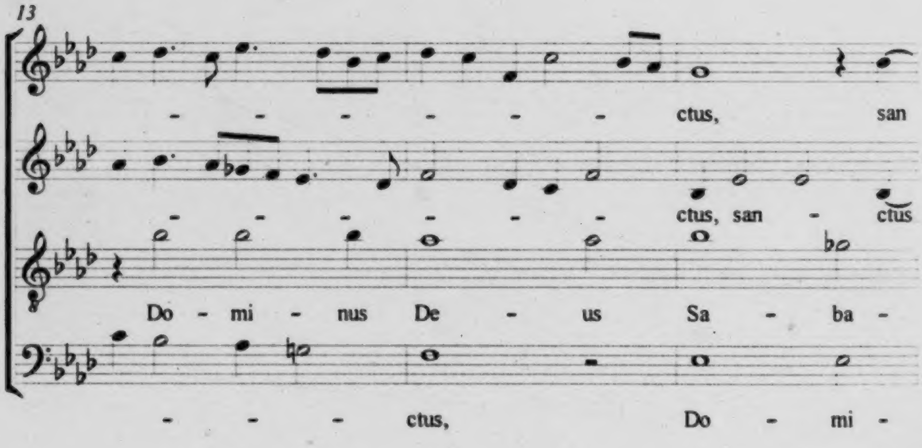
[11] The same sort of progression *technically* operates between alto and bass in measure 178, but this is very fleeting, so of itself is of little importance, just as also *technically* the C♭ here prevents a harmonic tritone with the alto.

[12] The full impact of this will not be realised until I discuss the passage which immediately follows it, a discussion which, for reasons that will become clear, will be reserved for Chapter 11 of this thesis.

In the opening of this movement (see Example 77), all parts with the exception of the free soprano line are clearly derived from Examples 54/1 and 54/2 (combined) of the *L'homme armé* melody. Their starting pitches, B♭, F and C, however, equally clearly will not allow all three to be solmised in the same way – as discussed in detail in Chapter 8. This style of melodic manipulation is particularly typical of la Rue's use of various of the motives of Example 54/3 in this movement, suggesting that when individual parts are considered as purely melodic entities, a number of different modal 'signatures' can be seen to be operating simultaneously.[13]

This is relatively un-problematic until the tenor takes up Example 54/3b(i) in measure 13. To discuss how this passage works, it must be considered in its entirety. Here is the final version:

Example 95



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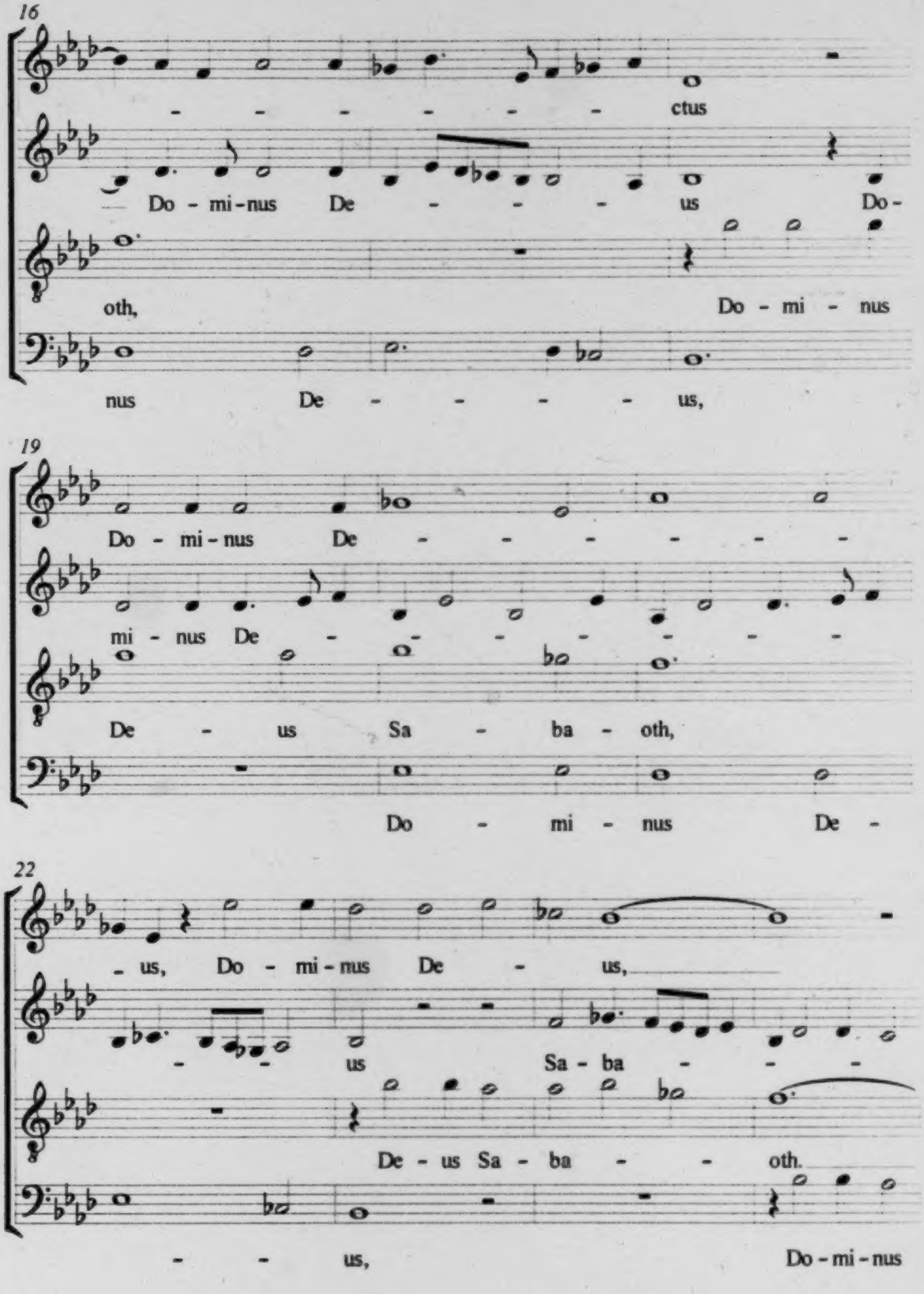
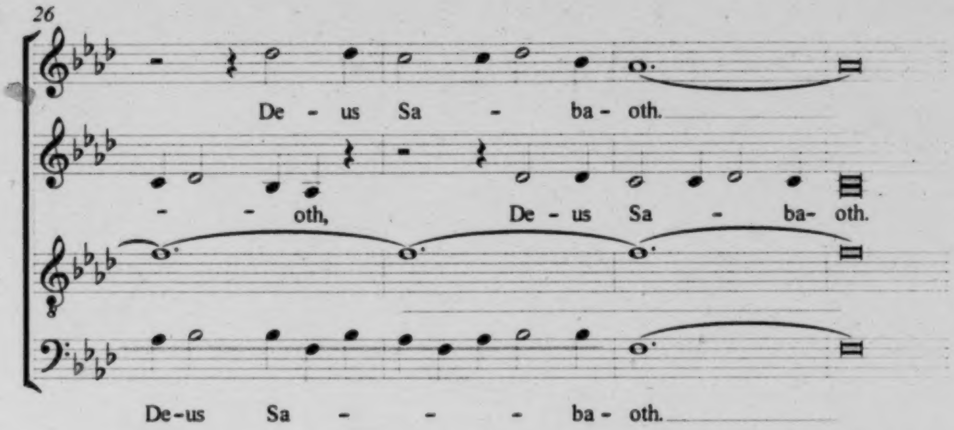
[13] Considering each part in a purely linear sense.


16
- - - - - - ctus
Do - mi - nus De - - - - us Do -
oth, Do - mi - nus
nus De - - - - us,
19
Do - mi - nus De - - - - - -
mi - nus De - - - - - -
De - us Sa - ba - oth,
Do - mi - nus De -
22
- us, Do - mi - nus De - us,
- - us Sa - ba - - -
De - us Sa - ba - - oth.
- - us, Do - mi - nus



The first aspect which requires consideration here is the modal identity of the tenor throughout. From the opening of the movement the tenor has held the true *cantus firmus*, but because of the nature of the *L'homme armé* melody, the mode cannot be finally determined until this particular passage.[14] The construction of the tenor from measure 13 to the end of the section presents two choices, corresponding with either Example 54/3a or Example 54/3b. In measures 15-16, and particularly 24-25, the tenor operates beneath a sustained B♭ in the soprano part, suggesting the movement to the fifth below with the *tactus* in measures 16 and 25 should be via the *major* third, G♭. If this is the correct interpretation, the ramifications of any decision to alter the G in tenor part should either uncover further evidence of the validity of this decision, or bring to light inconsistencies which will refute the assumption.

What then are the ramifications of tenor G♭'s in measures 15, 20 and 24?

1. The imitation in the bass (mm. 15-18 and 20-23; down an octave and a fifth) and soprano (mm. 22-24) should be solmised in the same way, creating C♭'s in measures 17, 22 and 24.
2. All G's are likely to be altered to G♭ throughout the section, resulting in G♭'s in measures 17 (soprano), 22 (soprano) and 24 (alto).

---

[14] Up until this point the melody has corresponded with Example 54/3a, but as this has only involved the root of the mode, B♭, and the compass of a fifth above, the actual identity of the mode is still open to question.

3. The ornamental passagework in the alto in measures 17 and 22 will incorporate C♭, as the counterpoint with the bass in both cases produces a *suprasemitone* cadence rather than a leading tone cadence at both measures 18 and 23.

Point 1 is strongly supported in measure 24 by the fact that only the alteration of the C to C♭ would allow the unison B♭'s between the tenor and soprano to be approached via the *minor* third.[15] The fact that the tenor and soprano are in such close proximity strengthens my assertion that the singers would most certainly have had a strong aural awareness of the interrelationship of these parts here, reinforcing further the need to inflect the progression to reflect this extremely familiar form. Also, in Chapter 9 I examined the construction of the cadential figure at measure 18 in fine detail, concluding that the suprasemitone cadence was applicable. This construction not only also supports point 1 above, but also provides conclusive validation for the other instance cited in point 3.[16]

As a final note, I am convinced the modal colouring la Rue provides here is entirely intentional, and that the introspective mood it creates is again reinforced when, at the very end, the composer contrives to prevent the possible application of the *tierce de Picardie* ending by an extended cadence of the type discussed in Chapter 4 (iv). This ending is made all the more colourful by the extremely unusual doublings la Rue uses at this final cadence, not only within the alto part, but also of the minor third itself - at the octave with the soprano. This ending I find quite compelling and utterly in keeping with my reading of the passage as a whole.

---

[15] A♮ is not an option on account of the fact that it would destroy the identification of the tenor line with the *L'homme armé* melody.

[16] The validity of point 2 is now fairly moot, as with G♭ and *its* recta extension C♭ now operating consistently, all the G's need to be altered in this section.

CHAPTER 11

Difficult sections

In this chapter I will consider three sections which, for different reasons, pose particular challenges. In each case, however, the solutions I have finally decided upon continue to reflect the theories and practices which govern this music – as discussed in the pages preceding – while perhaps taking some of these practices a little further. This does not mean to say that these solutions represent the only way in which this music can be performed, but I do believe they represent at least one valid way.

At the center of the *Gloria,* la Rue arrives at what is clearly a key structural marker with the two-voice cadence at measure 90. In the section which follows, in which the text *miserere nobis. Quoniam tu solus sanctus. Tu solus Dominus. Tu solus altissimus, Jesu Christe* is set, the following are important considerations:

1. The time change which accompanies the change in text context; a change in rhythmic character which persists *only* as long as does this textual concept.
2. The number symbolism la Rue employs here – directly dependent on the text concept.[1]
3. The composer's obsessive use of one motive derived from Example 54/3iii of the *L'homme armé* melody.

Clearly, therefore, this is a very important section for la Rue, yet I believe there is even more happening here than these factors alone suggest. If we consider the composer's use of the motive represented by Example 54/3(iii), the issue of which version or versions operate here must be the first addressed. Here is the passage in its final form:

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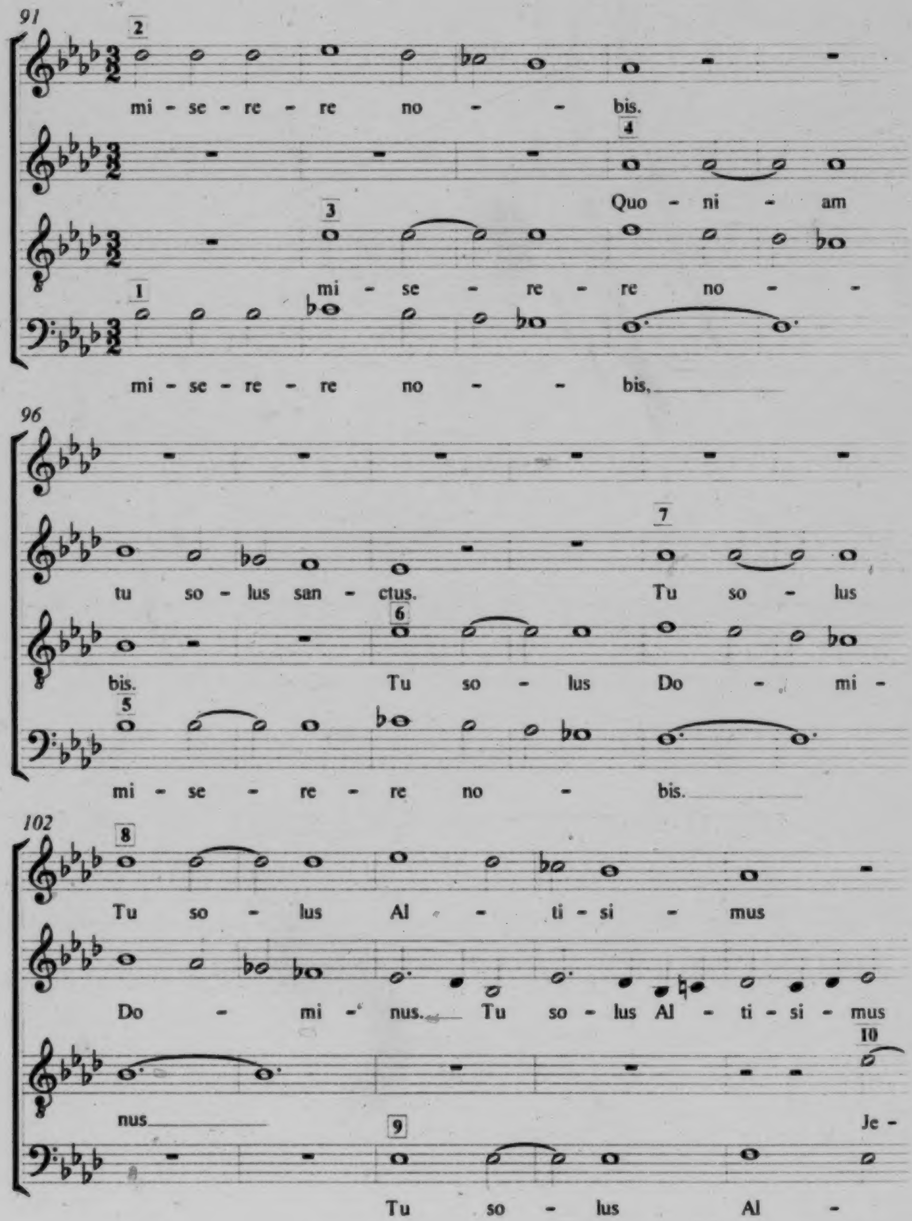
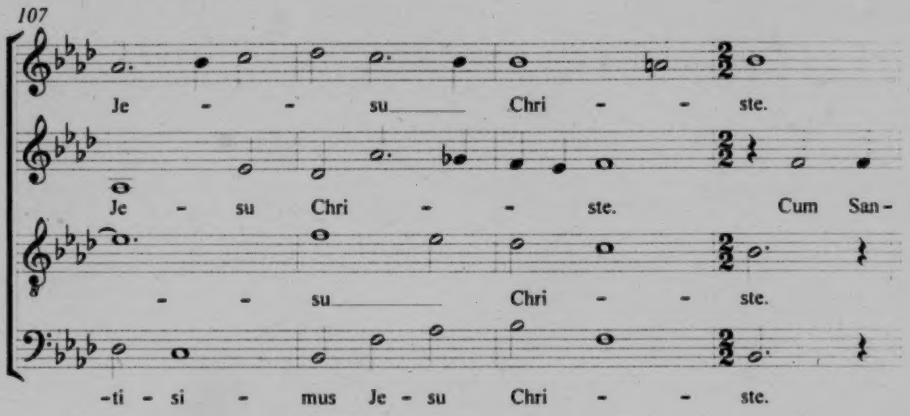
[1] The tenfold repetition of the motive here (see numbered entries in Example 96) has been identified by Elders as number symbolism associated with the name of Jesus Christ. Elders, 66. See also footnote 4 in Chapter 8.

Example 96


91
2
mi - se - re - re no - - bis.
4
Quo - ni - am
3
mi - se - re - re no - -
1
mi - se - re - re no - - bis,
96
7
tu so - lus san - ctus. Tu so - lus
6
bis. Tu so - lus Do - mi -
5
mi - se - re - re no - bis.
102
8
Tu so - lus Al - ti - si - mus
Do - mi - nus. Tu so - lus Al - ti - si - mus
10
nus Je -
9
Tu so - lus Al -


107
Je - - su Chri - - ste.
Je - su Chri - - ste. Cum San-
- - su Chri - - ste.
-ti - si - mus Je - su Chri - - ste.

It is immediately obvious from the first and second statements of the motive (marked accordingly above), that same solmisation will not be possible here, as to harmonise in exactly parallel minor 10ths would be unworkable. As the bass is the one part which carries the melody in its true pitch, I believe it is the intervallic make-up of this part which is of paramount importance. As will now be shown, examination of this line will lead to a solution for this passage which is really quite straightforward; however, as it does involve the use of significant *ficta* alterations (two flats beyond the key signature), it seems appropriate to discuss it within this chapter.

The underlying premise on which my reading is based once again revolves around the approach to the octave via the *major* sixth. Consider the 'downbeat' of measure 94. The F octaves reached here in the tenor and bass should be preceded by a major sixth,[2] and as E♮ would be highly improbable in the tenor in measure 93,[3] the only alternative is G♭ in the bass. With this *recta* alteration in place, the whole of the bass part from measures 91-101 can now be solmised in the soft hexachord, with the aid of a *fa super la* C♭. The fact that this alteration is consistent with a derivation for the bass part based on Example 54/3b, provides support for this reading.

---

[2] The slow, relatively homophonic effect here makes the aural perception of this expanding sixth ⇒ octave progression all the more obvious here.

[3] I have discounted the only other possibility, E♭ ⇒ E♭ ⇒ E♮ for the tenor in measures 92-93, as, although linear chromaticism is not entirely unknown in music of this period, it would seem to be too far beyond the limits of stylistic practice otherwise observed in this work.

Even if the sounding of the C♭ in the bass in measure 92 would not also have inevitably lead the soprano to make the same alteration in the following measure, another *causa pulchritudinis* progression – in this case of the type shown in Example 26[d] – also suggests this alteration should be made. Starting out at the octave with the tenor at measure 92, the soprano descends by step to sound a perfect fifth above the sustained tenor E♭ – certainly a key functional tone – spanning measures 92 and 93. The approach to this fifth should be via the *minor* sixth, thus requiring C♭ in the soprano at the start of this measure.

Having established the modified modal identity here, the C♭'s and G♭'s in measures 95, 97, 98, 99 and 101 all follow as a matter of consequence. In measures 102-104, however, the dovetailing of the imitative entries is modified, and the 'tonal' direction shifts subtly, with now octave E♭'s coinciding at measure 104. Having already discounted the likelihood of linear chromatic movement to approach these octaves (see footnoe 3), this leaves only the possibility of flattening the alto F in measure 103, an alteration which is further supported by the need to remove the *mi contra fa* by introducing G♭ in this measure as well. In the light of what has just been heard, this now seems quite logical.

The 'tonal' re-orientation which begins to take effect with the entries just described is further strengthened with the bass entry at measure 104. It is clear that the bass must mutate down from the soft into the adjacent natural hexachord for this entry, in order to accommodate the descent to the low B♭ in measure 108. With the concurrent contrary motion in the soprano, the expansion in texture achieved at this point superbly prepares the leading tone cadence in B♭ (m. 110) which will signal the end of this 'special' section, and usher in the time change for the exciting *Cum Sancto Spiritu* with which the movement ends.[4]

Thus, from what has been discussed above, I feel it is clear that la Rue has marked this as a text section to be accorded particular attention. Not least of the ways in which he achieves this is the modal manipulation of the ten successive motives, which not only maximises the effectiveness of the section, but also the impact of that which follows.

The second 'difficult' passage I would like to discuss in this chapter appears at the opening of the *Osanna,* where the issue of choosing between the two forms of G once again arises.

Notwithstanding the introduction of the melodic tritone which results, my ultimate solution for this passage begins by once again giving priority to the concept of approaching octave unisons by means of a *major* sixth, requiring G♭ in measures 75 and 81. After much experimentation with this passage,[5] I have come to believe the energy and intensity gained by these G♭'s outweighs the case against the melodic tritone, especially as in measure 75 the other alternative, E♮ in the tenor, is clearly impossible.

The ramifications of this alteration are not insignificant. Once this progression is established using G♭, its similarity to the counterpoint which follows between measures 79 and 82 suggests that the bass and alto should also have G♭'s in these measures.[6]

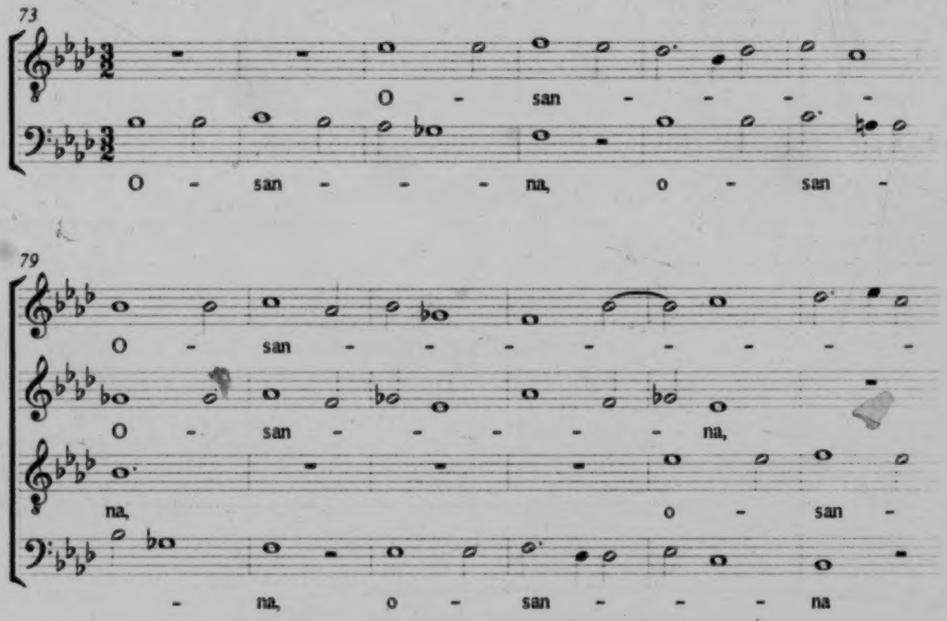
---

[4] This takes some time, however, as *causa pulchritudinis* still requires C♭ in the soprano in measure 105 (the part is also identical in solmisation to the previous soprano entry at 91). Solmisation of the alto line in the natural hexachord (on A♭) from measure 104, however, subtly re-introduces C♮, whose identity is then made all the more insistent in measure 108 when avoidance of *mi contra fa* with the bass requires it.

[5] Both before and during the rehearsal stage of the piece.

[6] Once all these G♭'s are in place it would be most perverse to naturalise the alto G in measure 83.

Example 97



In the light of this reading, it is only logical to inquire whether this distinctive motive, based on Example 54/3(iii), should be solmised in the same way on each appearance. Close examination of the passage reveals this to be extremely unlikely, however, as it would require both a particularly jarring simultaneous cross-relation - C♮ (bass) and C♭ (tenor) - in measure 78, and a suprasemitone cadence into measure 79. I have elected C♮ for both parts here, which in turn allows a *ficta* driven sub-semitone cadence at this point, on grounds which can only be described as purely aesthetic.

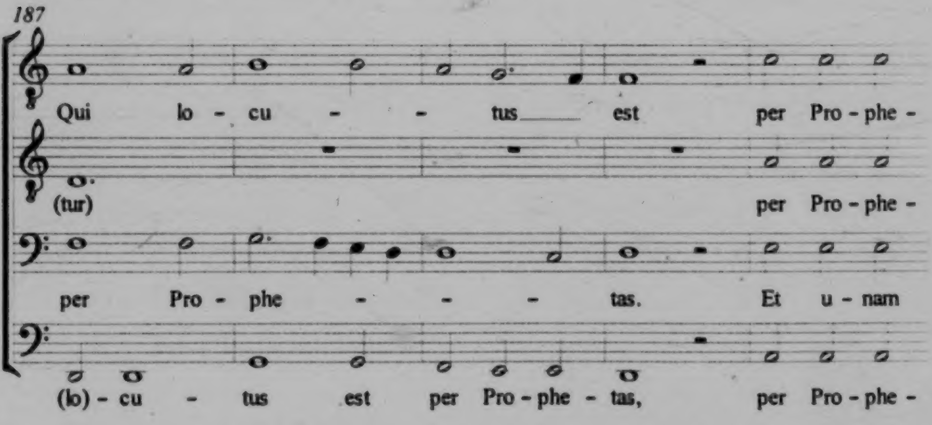
This is the one section of the whole Mass which includes perhaps the most obvious contradictions amongst the various of the 'rules' governing chromatic alteration, where one solution consistent with all of these rules is simply impossible to attain. In such a case, it seems decisions must come down very simply to a matter of judgement. Whilst I do not claim the solution offered here to be authoritative, I believe it is an appropriate one given the context of the passage.

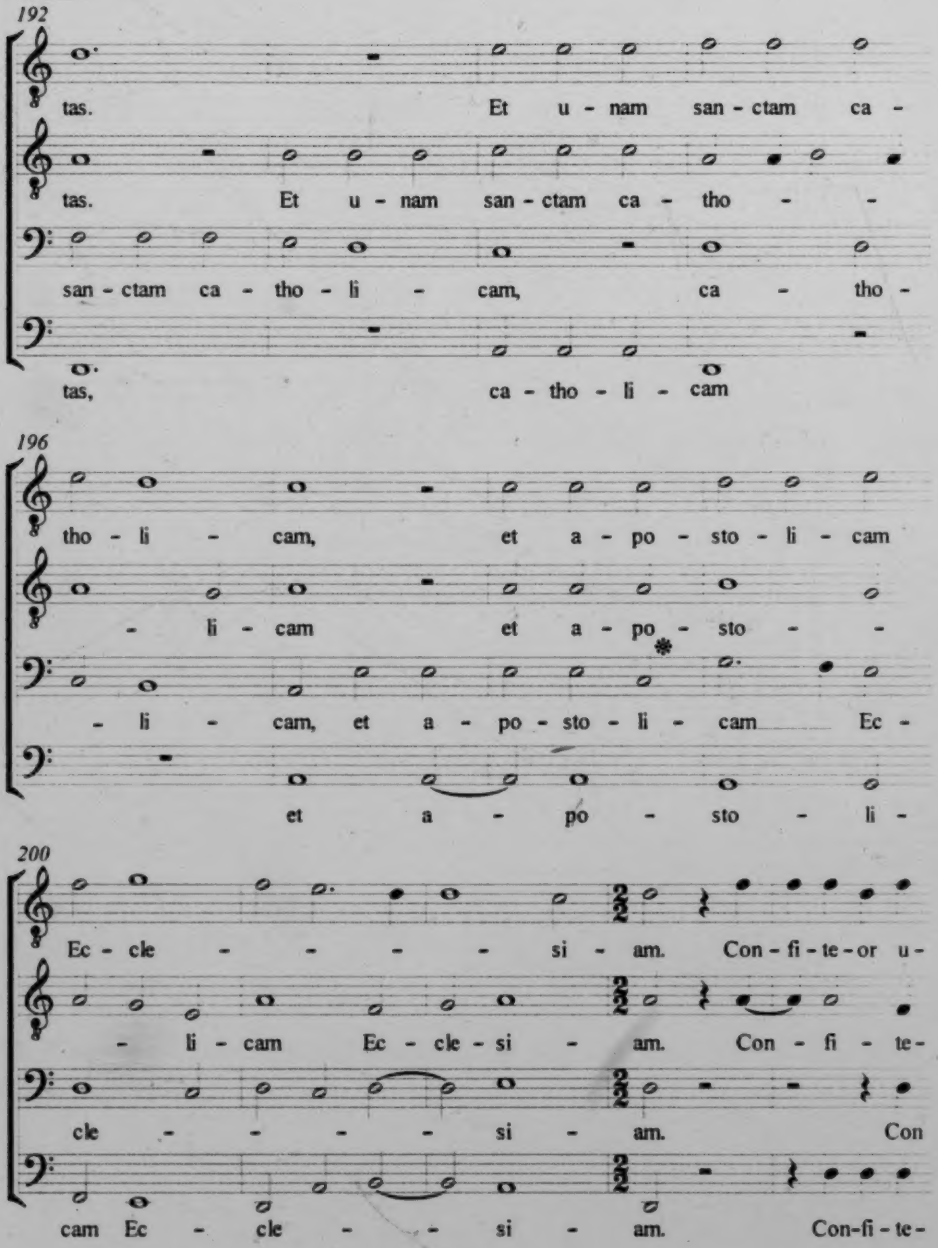
The final passage I will discuss in this chapter is one in which I will propose the only truly far-reaching application of *musica ficta* in my entire edition of this Mass. Once again, however, I believe the justifications for my reading of this passage are fundamentally grounded in the theoretical and performing practices of the time, and therefore contend that the interpretation which results is, at the very least, possible. It may seem strange that the passage in question should be the only one in this work to have been identified for this somewhat 'radical' treatment, but I believe there is sufficient evidence that la Rue himself singled out this specific passage in ways which, at the very least, justify our particular attention.

I have alluded to the passage in question before in my discussion of la Rue's response to text-based images towards the end of the *Credo,* and whilst these were not the inspiration sparking my investigation of this passage (as will be seen), they nonetheless do seem relevant to the solutions I see applying. The passage coincides with the text segment: *(Credo) Et in unam sanctam catholicam, et apostolicam Ecclesiam.*

As what I propose will entail seemingly unusual solutions - exploring more remote areas of *musica ficta* than have hitherto been encountered - I will discuss this passage it in its originally written pitch so that the full ramifications of what I propose are presented in as clear a manner as possible. Here is the passage unaltered:

Example 98


187
Qui lo - cu - - tus est per Pro - phe -
(tur) per Pro - phe -
per Pro - phe - - - tas. Et u - nam
(lo) - cu - tus est per Pro - phe - tas, per Pro - phe -


192
tas. Et u - nam san - ctam ca -
tas. Et u - nam san - ctam ca - tho - -
san - ctam ca - tho - li - cam, ca - tho -
tas, ca - tho - li - cam
196
tho - li - cam, et a - po - sto - li - cam
- li - cam et a - po - sto - -
- li - cam, et a - po - sto - li - cam Ec -
et a - po - sto - li -
❋
200
Ec - cle - - - - si - am. Con - fi - te - or u -
- li - cam Ec - cle - si - am. Con - fi - te-
cle - - - - si - am. Con
cam Ec - cle - - si - am. Con-fi - te-

One emendation is of paramount importance for this passage: I believe that the written C in the tenor part in measure 198 (marked by ❋) is in fact an error, possibly of scribal origin, and should be an E.[7] An examination of the part writing (for all voices) in this general vicinity is consistent with this interpretation. In every other case, repetition of notes continues until the very last possible moment before harmonic considerations compel movement. There is therefore no reason why the tenor should move from the E in measure 198, and nothing in any other part supports this movement; to do so is quite out of character with the seamlessness of the part-writing at this point.

Why have I attached such importance to one note which, on the face of it, hardly seems to change anything of substance in this passage? The answer to this question will hopefully become clear when my alternative reading of this passage is examined in detail. Before doing this, however, it is necessary to speak briefly about the impetus which originally inspired my interest in such an alternative reading.

In Chapter 10, I examined in detail the section prior to this passage. One of the results of this discussion was to strongly favour the alteration of the hard B[8] for most of the central section of the *Credo*. This section culminates in the time signature change at measure 186 immediately preceding the passage now under discussion.

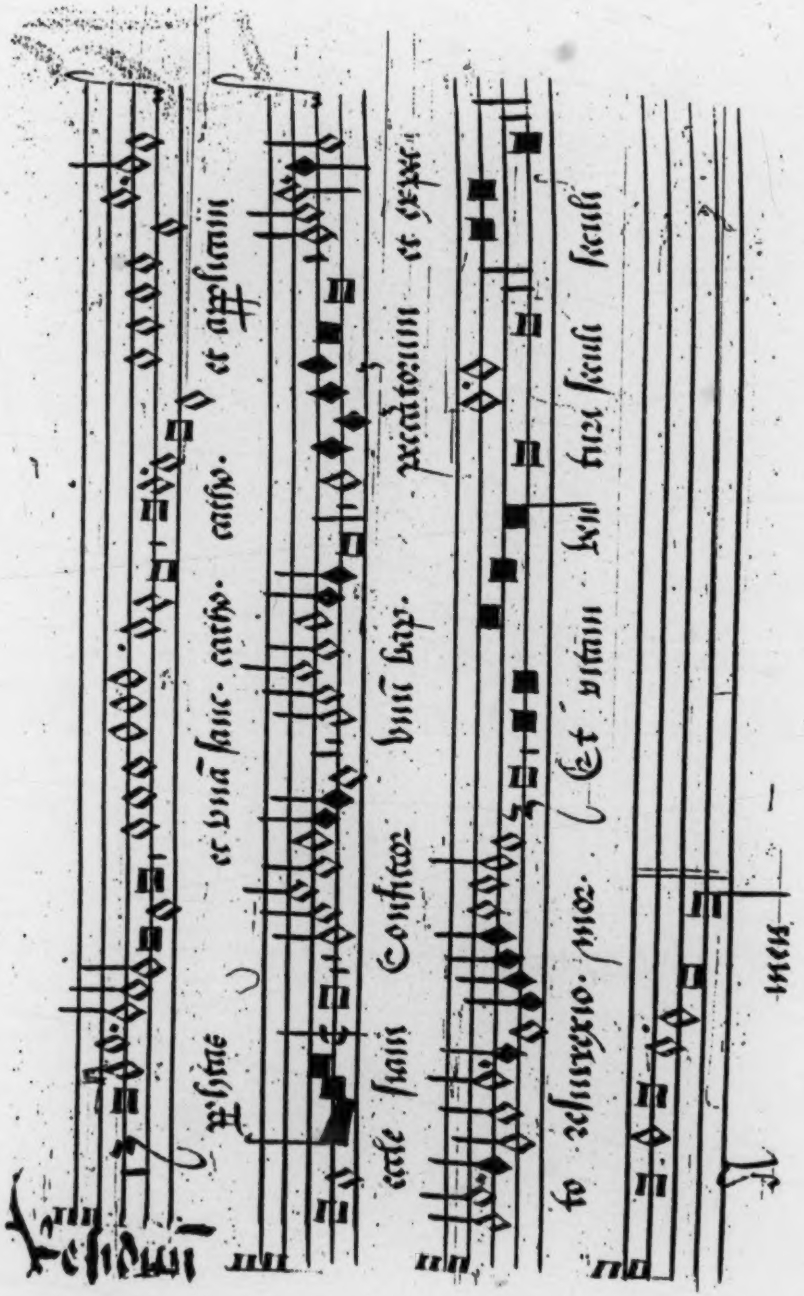
If one looks at the soprano entry at measure 187, the compass of the ensuing phrase, including both B and F, clearly suggests that the soft B still functions in this transitional passage between measures 186 and 190. I say 'transitional' because another aspect of the writing here is of exceptional importance. One might expect the time change itself to be the most significant structural marker here, but this is clearly not the case when one considers the extraordinary full cadential close - followed by rests in *all* parts - at measure 190.

---

[7] One can easily imagine such an error occurring, as, similarly with modern notation, it is very easy to mistake a note and displace it one line or space higher or lower than actually intended. Something similar is what I believe has happened here. The relevant section of the partbook of MS 9126, showing the *tenor* at this point is reproduced on page 179.

[8] This previous discussion was of course directed at the transposed version: for B read G, therefore.

Facsimile of a section of Brussels MS 9126 showing the tenor of the part-book



There are only three occasions in the entire work in which the composer employs intermediate structural punctuation of the variety we can observe here,[9] and as one of the others occurs at the end of the very section under discussion, it seems undeniable that what is contained *within* these two rare events is of particular importance for la Rue. It is the mechanics of this cadence which particularly interest me, as *this* is the point at which I originally began to suspect that there may be some hidden significance in this passage.

Accepting the B♭ in measure 188 (discussed in the paragraph two previous), the cadence which follows clearly is of the subsemitone variety, and requires C# in the *tenor.* In this context, the F in the *discantus,* which anticipates the cadence at measure 190, strikes a particularly jarring note despite its passing nature, as it simultaneously creates a dissonant minor 9th above the *bassus,* as well as a nearly as dissonant diminished 4th above the C# of the *tenor.* As a result, I have altered the F's to F#'s at both measures 189 and 190, creating an intermediate *tierce de Picardie* cadence consistent with progressions of this type already discussed in detail in Chapter 4 (iv).

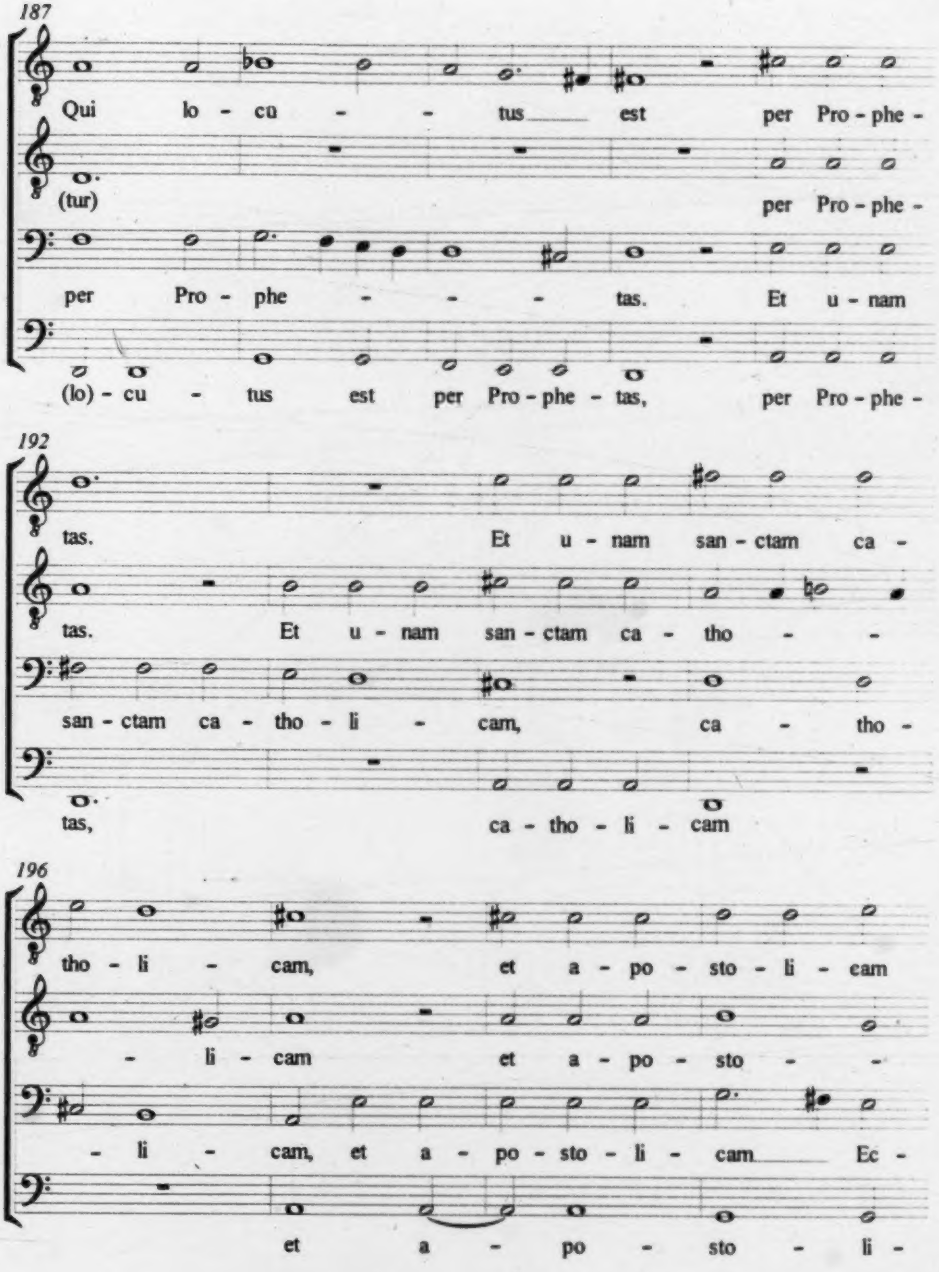
I have already shown this particular cadence to be of exceptional structural importance, and as the *only* intermediate cadence in the entire work which has this function, I feel confident it can be treated in this manner. The ramifications of this decision for the passage which follows are the real focus of my attention here.

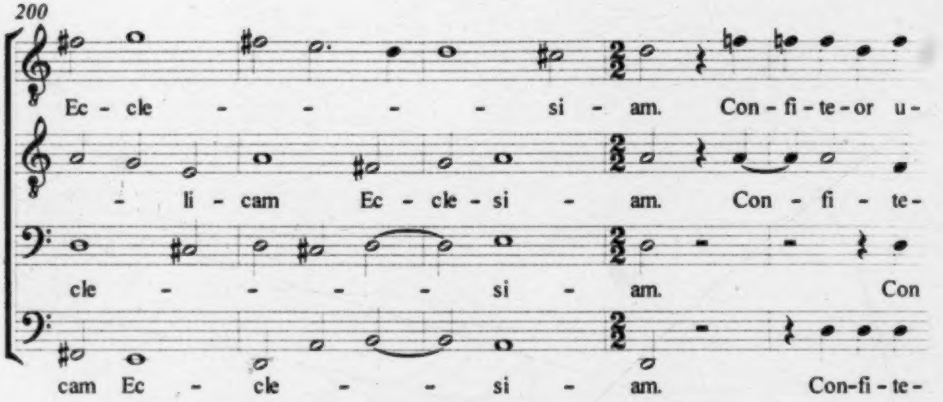
With this essential cadential structure in place as a transition, here then is the passage as I feel it should sound:

---

[9] The third is at m. 91 in the *Gloria.* This example is less definitive than the ones under discussion here, however, as it only involves two voices, and there is no third in the final chord. The fact that the third *is contained* in the final chord *approaching* our section here, and is *not contained* in the chord with which it *ends*, are of vital importance to the viability of what I will propose here.

Example 98

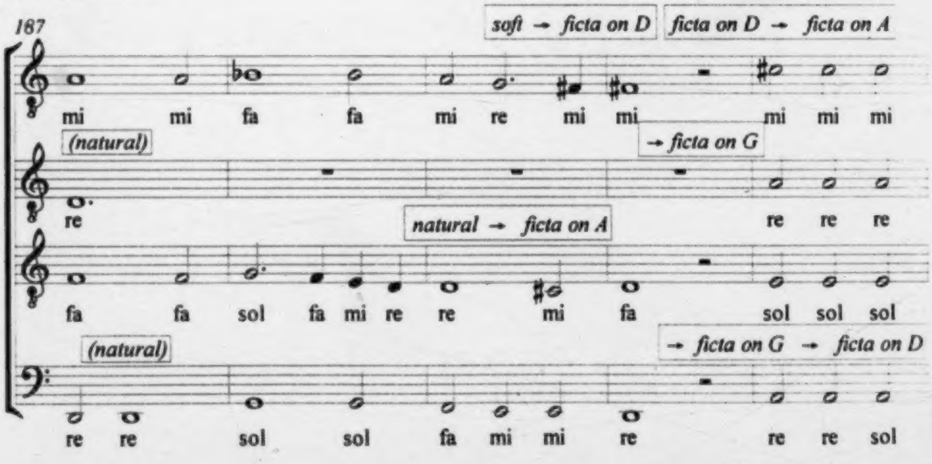

187
Qui lo - cu - - tus est per Pro - phe -
(tur) per Pro - phe -
per Pro - phe - - - tas. Et u - nam
(lo) - cu - tus est per Pro - phe - tas, per Pro - phe -
192
tas. Et u - nam san - ctam ca -
tas. Et u - nam san - ctam ca - tho - -
san - ctam ca - tho - li - cam, ca - tho -
tas, ca - tho - li - cam
196
tho - li - cam, et a - po - sto - li - cam
- li - cam et a - po - sto - -
- li - cam, et a - po - sto - li - cam Ec -
et a - po - sto - li -

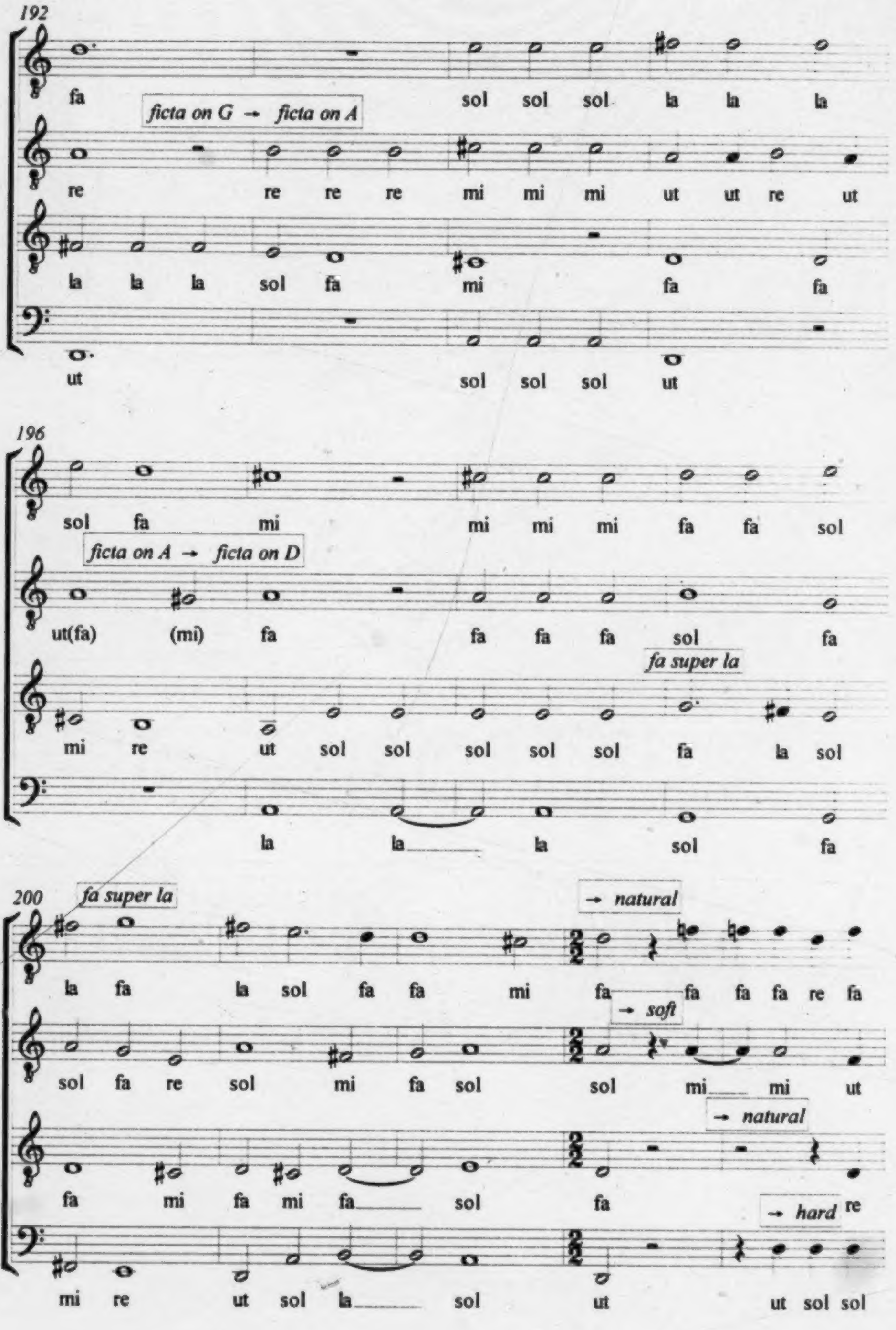

200
Ec - cle - - - - si - am. Con - fi - te - or u-
- li - cam Ec - cle - si - am. Con - fi - te-
cle - - - - si - am. Con
cam Ec - cle - - si - am. Con-fi - te -

Although so many sharps may well have been unusual in music of this period, they were all well known as possible alterations within the realm of *musica ficta.* We should not, however, be unduly concerned with the passage's alarmingly 'avant-garde' appearance in a modern score. In sounding what appears above, while singers of the period would certainly have realised they were within the realm of *musica ficta,* they would have been far less concerned about what we would consider an abundance of unusual 'accidentals,' as it was not the *actual pitches* they were singing that were important, rather, a conceptualisation of hexachordal organisation.

To demonstrate this, let us consider how the above could have been solmised. Mutations are given in the boxes above the relevant parts:

Example 100


187
soft → ficta on D
ficta on D → ficta on A
mi mi fa fa mi re mi mi mi mi mi
(natural)
→ ficta on G
re
natural → ficta on A
re re re
fa fa sol fa mi re re mi fa sol sol sol
(natural)
→ ficta on G → ficta on D
re re sol sol fa mi mi re re re sol


192
fa
ficta on G → ficta on A
sol sol sol la la la
re re re re mi mi mi ut ut re ut
la la la sol fa mi fa fa
ut sol sol sol ut
196
sol fa mi mi mi mi fa fa sol
ficta on A → ficta on D
ut(fa) (mi) fa fa fa fa sol fa
fa super la
mi re ut sol sol sol sol sol fa la sol
la la la sol fa
200
fa super la
→ natural
la fa la sol fa fa mi fa fa fa fa re fa
→ soft
sol fa re sol mi fa sol sol mi mi ut
→ natural
fa mi fa mi fa sol fa re
→ hard
mi re ut sol la sol ut ut sol sol

As suggested above, the catalyst for this entire reading were the F#'s in the *discantus* in measures 189 and 190, which would then require C# in measure 191. In this light, consider the remarks on *ficta* mutations by French theorist Yssandon, when speaking on the general topic of exceptions to the more general methods by which mutation can occur:

> Also, when large intervals such as the octave, the fifth, and the perfect fourth are concerned, we must ascend without making mutation[10] from *re* to *re*, from *mi* to *mi*, and we must also descend from *la* to *la*, from *sol* to *sol*, from *fa* to *fa*.[11]

As can be seen from the example above, this is exactly what must occur here, with the perfect fifth from measure 190 to measure 191 interpreted as a *mi* ⇨ *mi* progression, commencing in the *ficta* hexachord on D and progressing to one based on A. Rather than actually being particularly aware of singing C#, therefore, the singer would sing *mi* here exclusively to retain the purity of the direct fifth. This is not to suggest that the alteration would have been in any way 'unconscious', certainly the singer would realise that the music had left the *recta* realm in favour of the *ficta*, and that a return to *recta* would be required at some later point. It is very clear to me that this return to the *recta* domain is indicated at the *next* definitive cadence, one which - extraordinarily - once again features rests after *all* parts (m. 203).[12] It is similarly clear that with the aid of *fa super la* in measure 200, the *discantus* can remain entirely within the hexachord on A (established at 191, as described above) for this entire passage.

What of the other parts? It is surprising how seamless the modulation can appear, if the following factors are considered:

---

[10] Yssandon does not actually mean no mutation occurs in such circumstances, rather, that one's position in the hexachord array remains constant. In effect this simply means the syllable stays the same, but the actual hexachord must change. Allaire also interprets these comments in this way: "It surely makes sense that, if one leaps from *one hexachord to another* [italics mine], the degree-syllables and the sounds of the latter must be used." Allaire, Theory of Hexachords, 51.

[11] Yssandon, quoted in Allaire Theories of Hexachords, 51.

[12] This is the other cadence to which I referred at the commencement of my discussion of this passage.

1. The *tenor*, after altering the *re–ut–re* in measures 189-190 for the leading tone cadence, need only *remain* in the *ficta* hexachord on D thereby created. With the aid of *fa super la* in measure 199, the whole passage can remain in this hexachord.[13]

2. Like the *discantus*, both the *contratenor* and the *bassus* have ascending fifths at the commencement of the modulated section, and if these 'improper mutations' are carried out in the fashion suggested by Yssandon above – that is *re* ⇨ *re* in both cases, mutation to a hexachord within the recta compass of the 'new key' is achieved.[14] The subsequent mutations occurring at mm. 191 *(basuss)*, 193 *(contratenor)* and 197 *(contratenor)* then take on familiar status as textbook examples of mutations to related hexachords.

Thus the transition into the *ficta* area is remarkably easily achieved. Also remarkable is how both instances of *fa super la* seen to operate within this modulated section are so comfortably accommodated, which in turn suggests that this may indeed have been the composer's intention. There is nothing here which was outside the abilities or knowledge of the Renaissance singer, and I believe the ease with which this modulatory passage is created, sustained and departed from,[15] all contribute to its compelling plausibility as an alternative reading for this passage.

Having explained the reasoning behind my reading of this passage, it is now hopefully apparent how crucial the 'wrong note' C has been in justifying this rendition.[16] If in fact this is *not* a wrong note, and the C is intended, its direct progression to G for the next note suggests it would have been significantly less likely the C would have been altered to C#, as the direct diminished fifth created here would have been awkward. Awkward, but not impossible, as measures 198-199 would then have been solmised as *sol-sol-**mi-fa**-la-sol* (see Example 100, above), still entirely within a *ficta* hexachord on A. It must not be forgotten that within a hexachordal order utilising *fa super la,* the diminished fifth is naturally encompassed between the 3rd and 7th steps.

---

[13] It should now be obvious why I contend the C in measure 198 is incorrect, as this would now be rendered as C#, creating a very awkward direct tritone with the *next* note, G *fa super la* (F#). E here looks now even more likely.

[14] Conceptually, a 'key' with two sharps in the signature (which is in effect what is happening here) would have the hard hexachord on A, the natural hexachord on D, and the soft hexachord on G (with C♮ as a *recta* alternative). These are the three hexachords in operation here.

[15] The return to the diatonic realm would have been a simple matter for these singers, who were so totally used to reading certain pitches by their commonly used 'names' that the mental re-alignment they knew would have been required here, would be easily imagined. (As mentioned before, the singers would be aware that the *ficta* realm would have to be quit at the earliest practical opportunity).

[16] See also footnote 13 above.

I raise this issue here as no doubt there will be some who will argue my decision to interpret this C as an error in the manuscript. Having explained the reasoning behind this decision, I suggest that is at least possible that this note could be a quite understandable scribal error. I am not suggesting that my solution is 'the' correct one, but that it is apossibile one which seems justified by some fairly convincing evidence suggesting the passage to have been set aside for special treatment by the composer.

As a final commentary on this passage, it is interesting to note Edward Lowinsky's 'criteria' for altered passages such as this. Lowinsky was one of the most important twentieth century scholars in matters concerning music of this period; however, his conclusions and methods have been fairly universally rejected by the generation of scholars his work arguably spawned. Nonetheless, when one applies the following to the passage just considered – despite the value-judgement laden aesthetics they represent - it is quite striking how applicable they seem:

1 There must be a fluent, logical and flawless modulation.

2 The modulation must be artistically superior to the diatonic reading.

3 It must coincide with a significant emotional or religious concept in the text.[17]

---

[17] While it is not the purpose of this thesis to explore la Rue's approach to text setting, I believe the particular section of the Mass text with which we are dealing now was of particular significance to him. Why this might have been the case is unknown at this stage. What is observable is that of his 29 firmly attributed Masses (I have excluded the *Requiem* here for obvious reasons), 14 works present this section of text with heavy use of repeated note motives, more often than not combined with significantly more homophonic texture. These works are the Masses *O gloriosa Margaretha, O salutaris hostia, Puer natus est nobis, Beata Virgine, De feria, Sancta Anna, Sancto Job, Incessament, Ista est speciosa, Nunca fué pena mayor, Assumpta est Maria, Ave Sanctissima Maria,*

4 It must last no longer than this particular section of text.

5 At the point of text change, it must arrive at a cadence that does not leave the music in some remote key, but that leads it back to the diatonic mainstream.

6 To render the transition from the chromatic to the diatonic zone frictionless, the cadence should preferably consist of an empty fifth or octave so as to establish a neutral zone between, . . . the preceding [key] . . . . and [the] coming [re-establishment of the diatonic mainstream reaffirmation.]

I repeat, the fortuitous coincidence of all or most of these procedures is highly improbable. This improbability has escaped the skeptics.[18]

Sine nomine I, and *L'homme armé I.* In a further 4 works – *Sancta cruce, Sancta Antonio, De Septem doloribus* and *T'andernaken* – the technique observable in this section bears some comparison with the previous works. In the remaining 11 works other methods are employed.

[18] Edward Lowinsky, "Secret Chromatic Art Re-examined" Music in the Culture of the Renaissance and Other Essays, (Chicago: University of Chicago Press, 1989), 770.

PART C

THE EDITION

CHAPTER 12

Practicalities of this edition

This is an edition for *performance*, and is thus designed to be accessible for a modern mixed-voice chamber choir. I have already discussed the issue of transposition in this work; however, in order to comfortably place the piece within the range of the type of ensemble identified, there are also two short passages in which the *contratenor* (alto) and *tenor* (tenor) parts have been exchanged. The first of these comes in the opening *Kyrie*, from measures 6 to 9; and the second between measures 74 and 79 in the *Credo*.

It is not the purpose of this thesis to examine in any detail the vexing question of text underlay, which presents difficulties in much of the music of this period,[1] particularly with la Rue.[2] I originally assigned text in a fashion similar to that which appears in Davison's edition (based on MS 9126), but a significant number of alterations were added both before and after the commencement of rehearsals. In all cases these were practical and subjective, based on a version which presented the most manageable and naturally singable alternative. In some, but not all cases, these alterations involved the following considerations:

1. Matching text for imitative consistency.
2. Alterations to avoid awkward reiterations of pitch without syllabic change.
3. Changes which facilitated a greater awareness of sequential passages.
4. Altering text to allow for better tuning with specific voices in mind.

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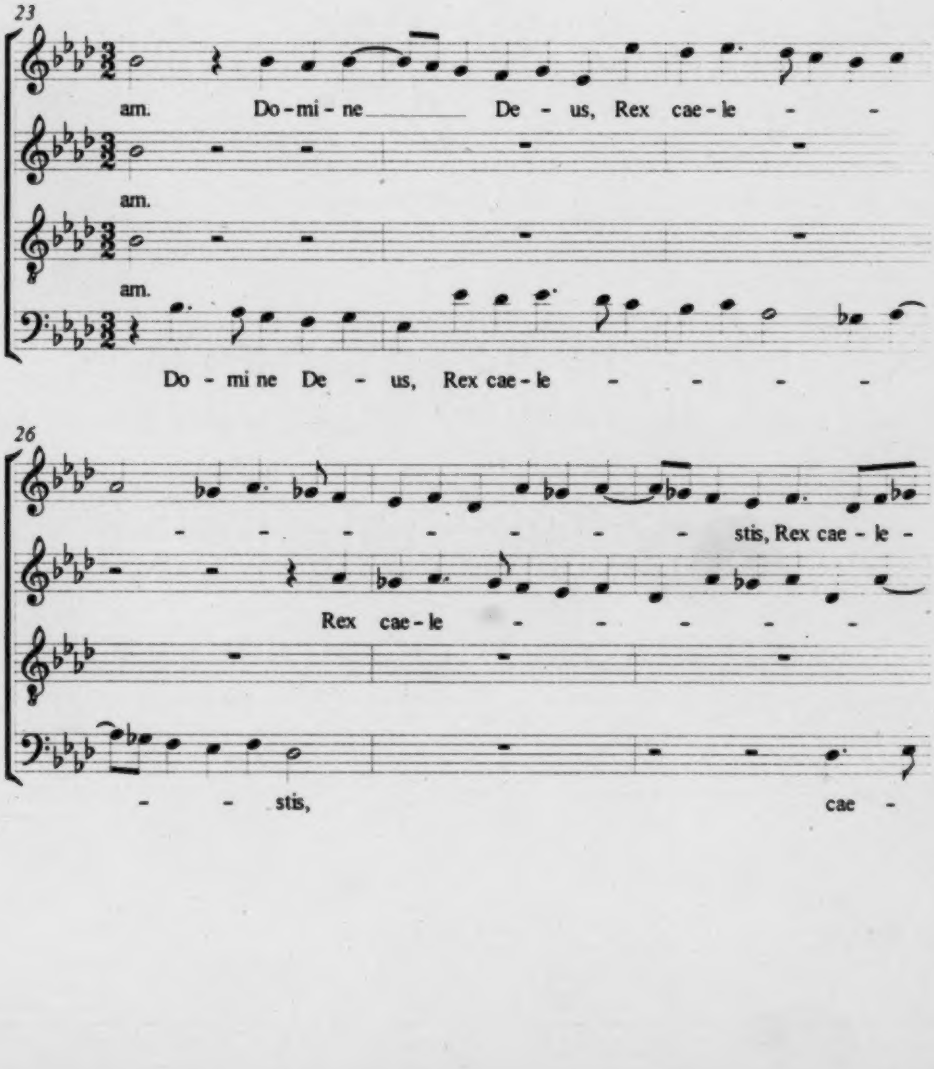
[1] See Don Harran, Don. "New light on the question of text underlay prior to Zarlino." Acta musicologica, xlv/1 (January-June 1973) 24-56. Also Gary Towne, "A systematic formulation of sixteenth-century text underlay rules." (Part I) Musica disciplina, 44, (1990), 255-287. "A systematic formulation of sixteenth-century text underlay rules." (Part II) Musica disciplina, 45, (1991), 143-168.

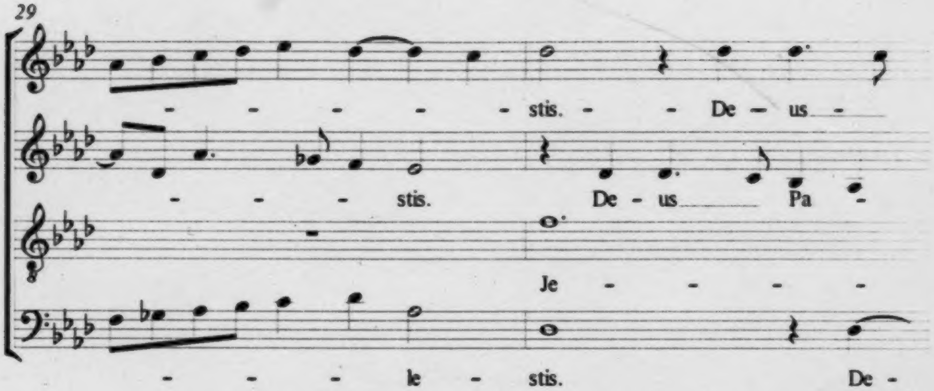
[2] See Davison, Keahey, and Kreider, La Rue, xvi-xvii.

As there can really be no claim to absolute authority for any application of text in this music, none of these alterations represent any degradation of the composer's intention.

There is one text alteration I have made which is much more significant than those described above, however, and this particular case requires further comment. The passage in question occurs in the *Gloria,* in which my editorial decisions have somewhat wider ramifications. The original underlay of this passage is as follows:

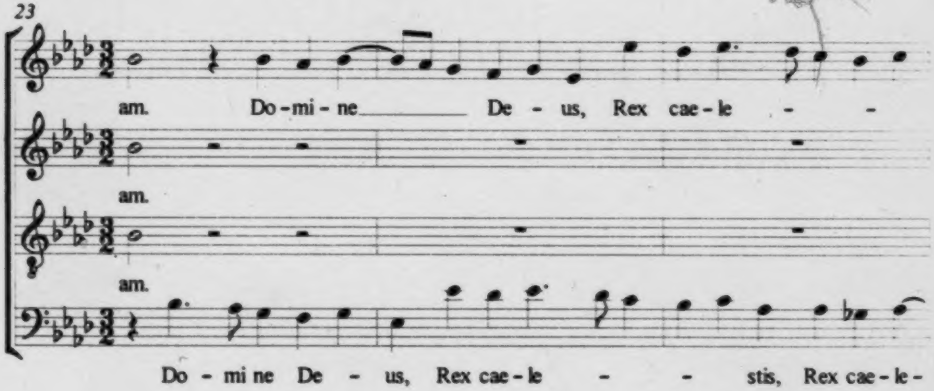
Example 101a

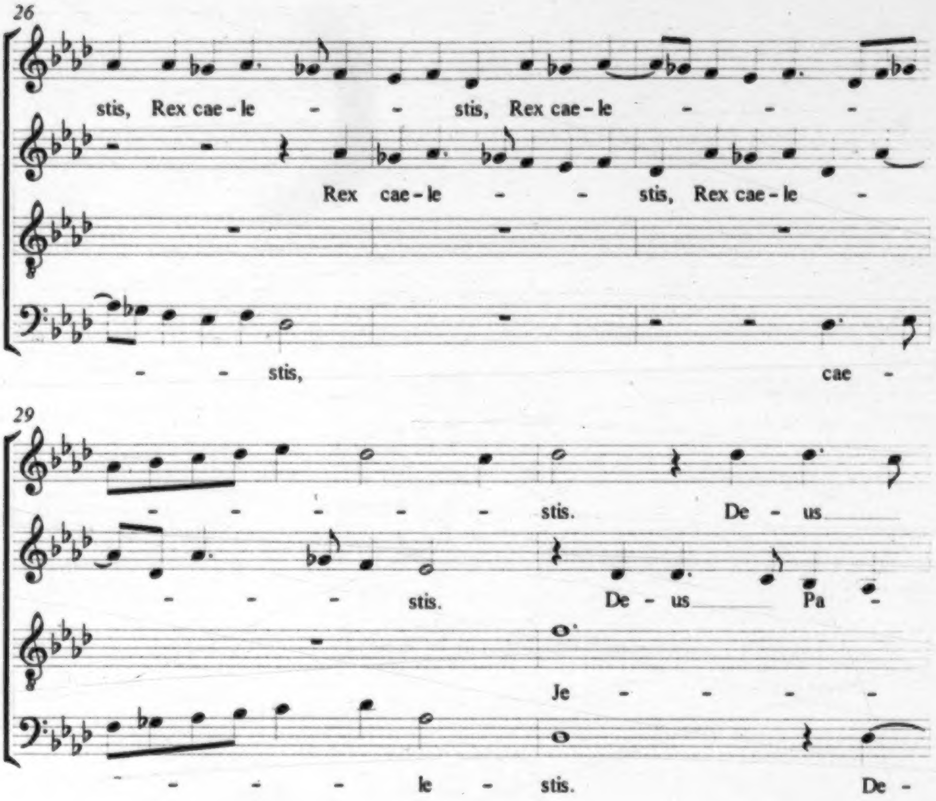

23
am. Do-mi-ne De - us, Rex cae-le - -
am.
am.
am.
Do - mi ne De - us, Rex cae-le - - - -
26
- - - - - - - stis, Rex cae - le -
Rex cae-le - - - - -
- - stis, cae -



A close examination of the above passage clearly shows all three parts involved are based on an eight-note motive first stated by the soprano on the words *Domine Deus.* This motive is then repeated on *Rex caelestis,* now spread over two motive statements, in which the half-note A♭'s in measure 25 (bass) and 26 (soprano) are incorporated into both. I believe a far more effective method here is to repeat the text by breaking up both these half notes into two quarters. This maintains the integrity of the imitative construction of the passage, as well as being much more logically singable, as follows:

Example 101b


23
am. Do - mi - ne De - us, Rex cae - le - -
am.
am.
Do - mi ne De - us, Rex cae - le - - stis, Rex cae - le -



I have already discussed in the preface my decision to mark all accidentals in the modern fashion, next to the notes they modify. As there is arguably only one 'signed' B♭ (G♭) in the primary source for this Mass,[3] I feel confident that this decision will not produce any confusion as to what is 'original' and what is editorial, as it needs only to beremembered that all accidentals – and, in some cases, their consequential corrections - are mine.

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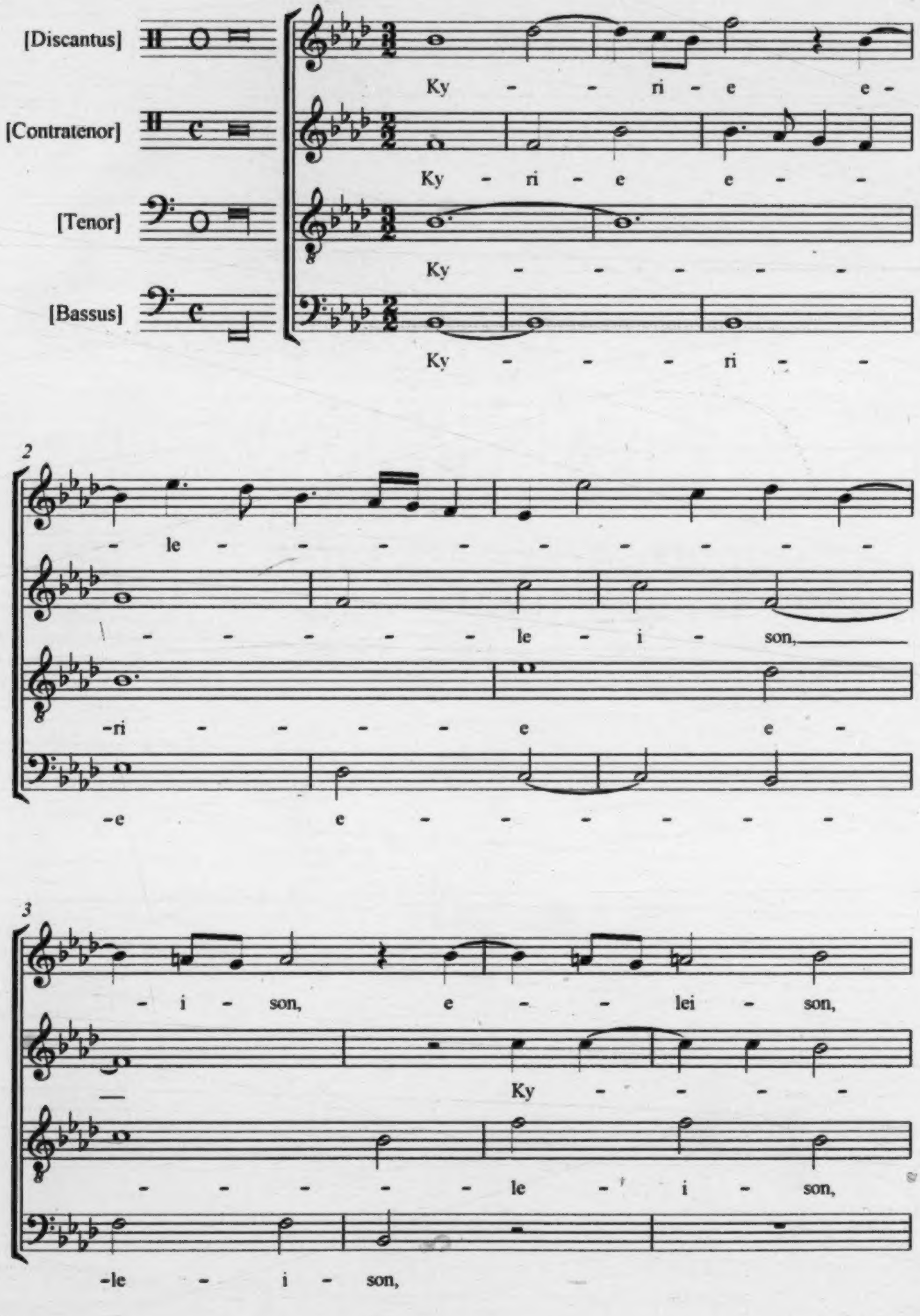
[3] See Chapter 7 and the discussion of signatures in the three *Agnus* settings.

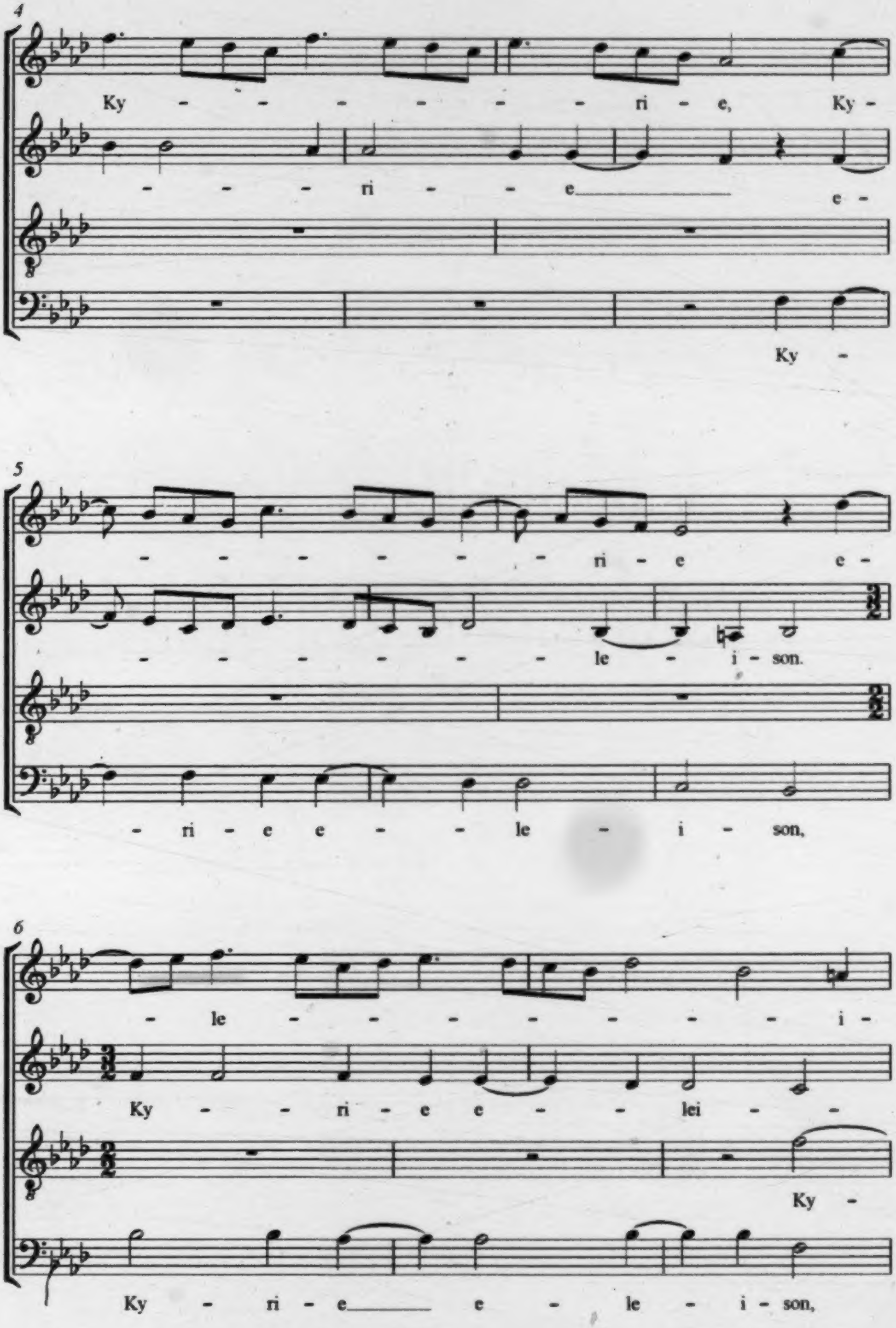
Missa L'homme armé I

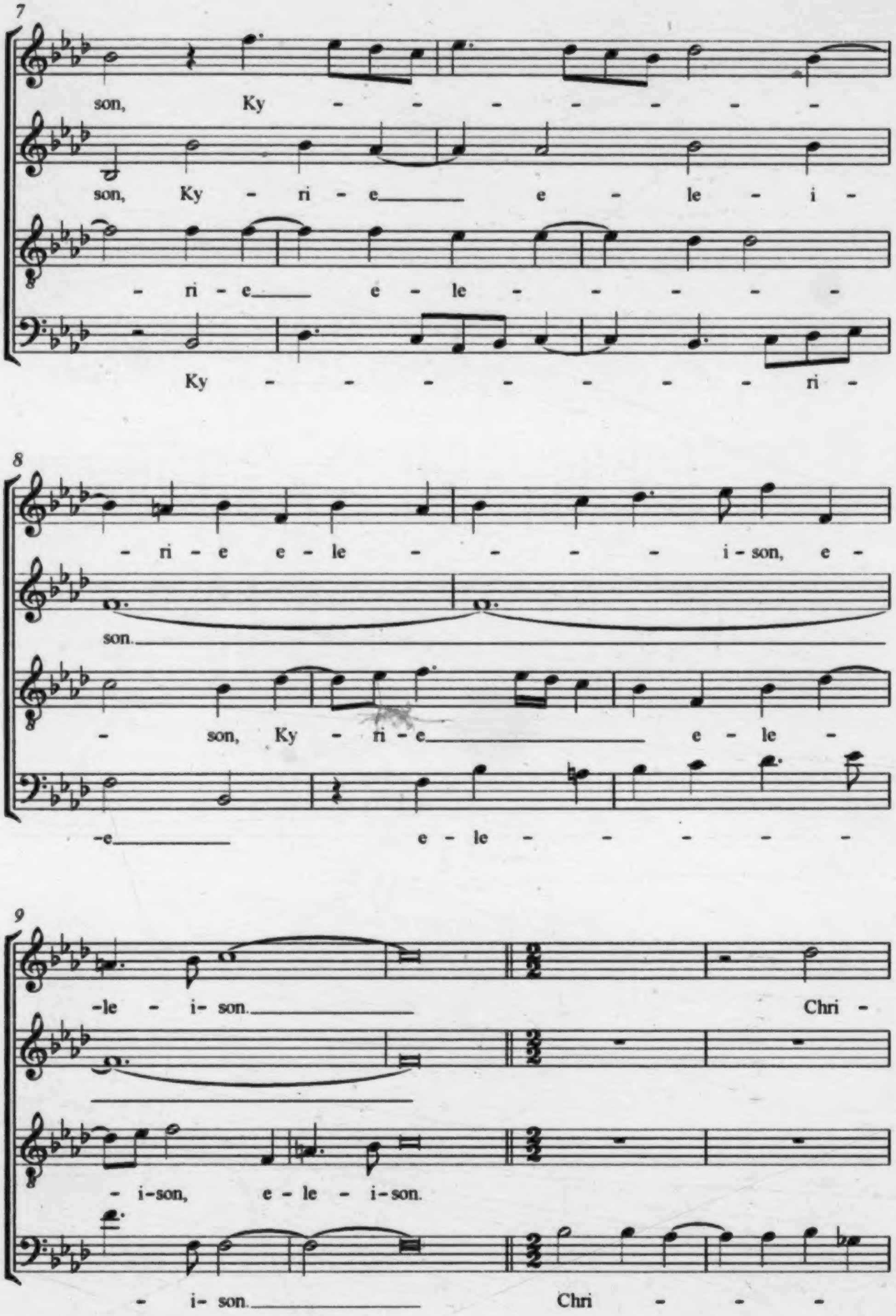
(SATB version)

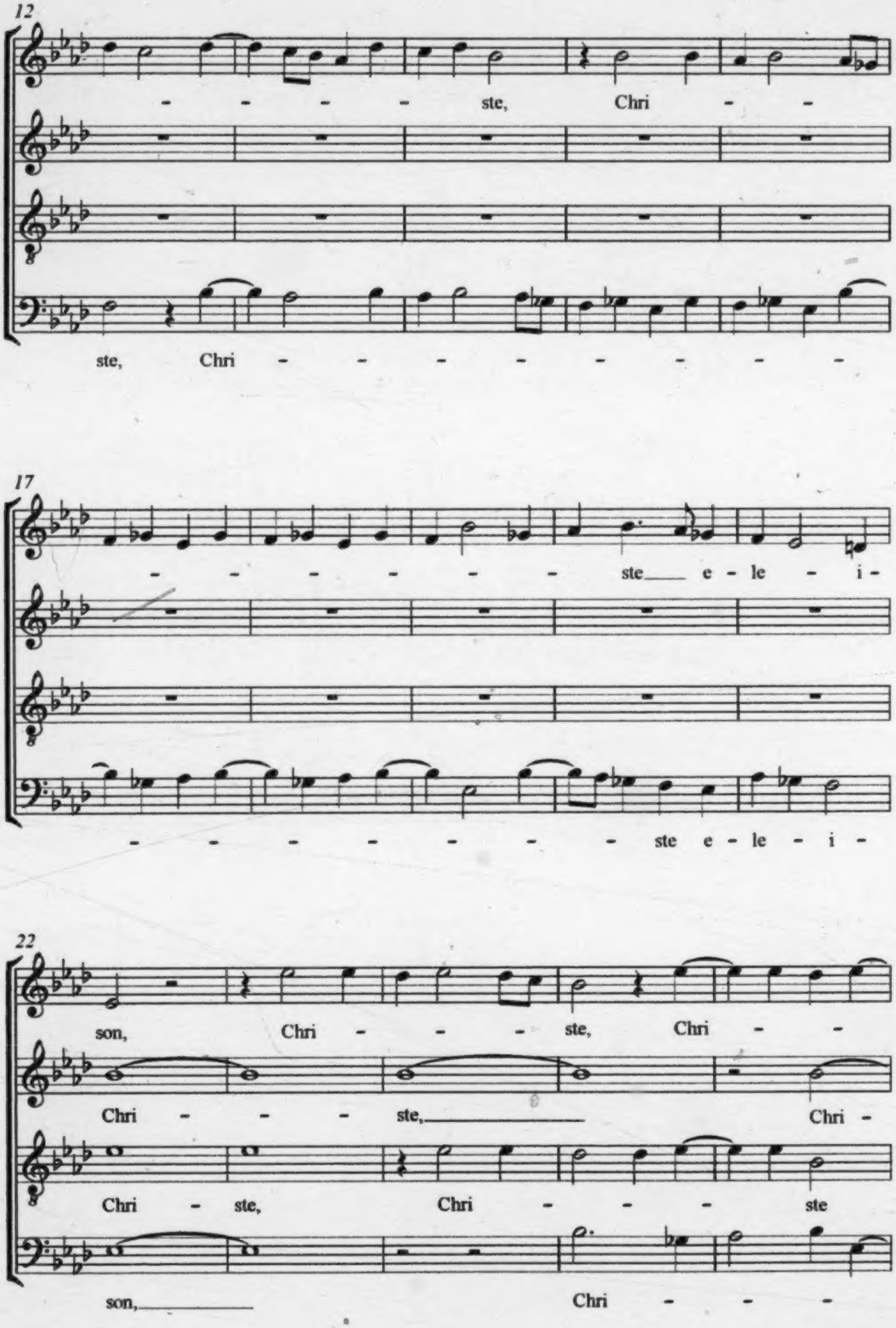
Pierre de la Rue

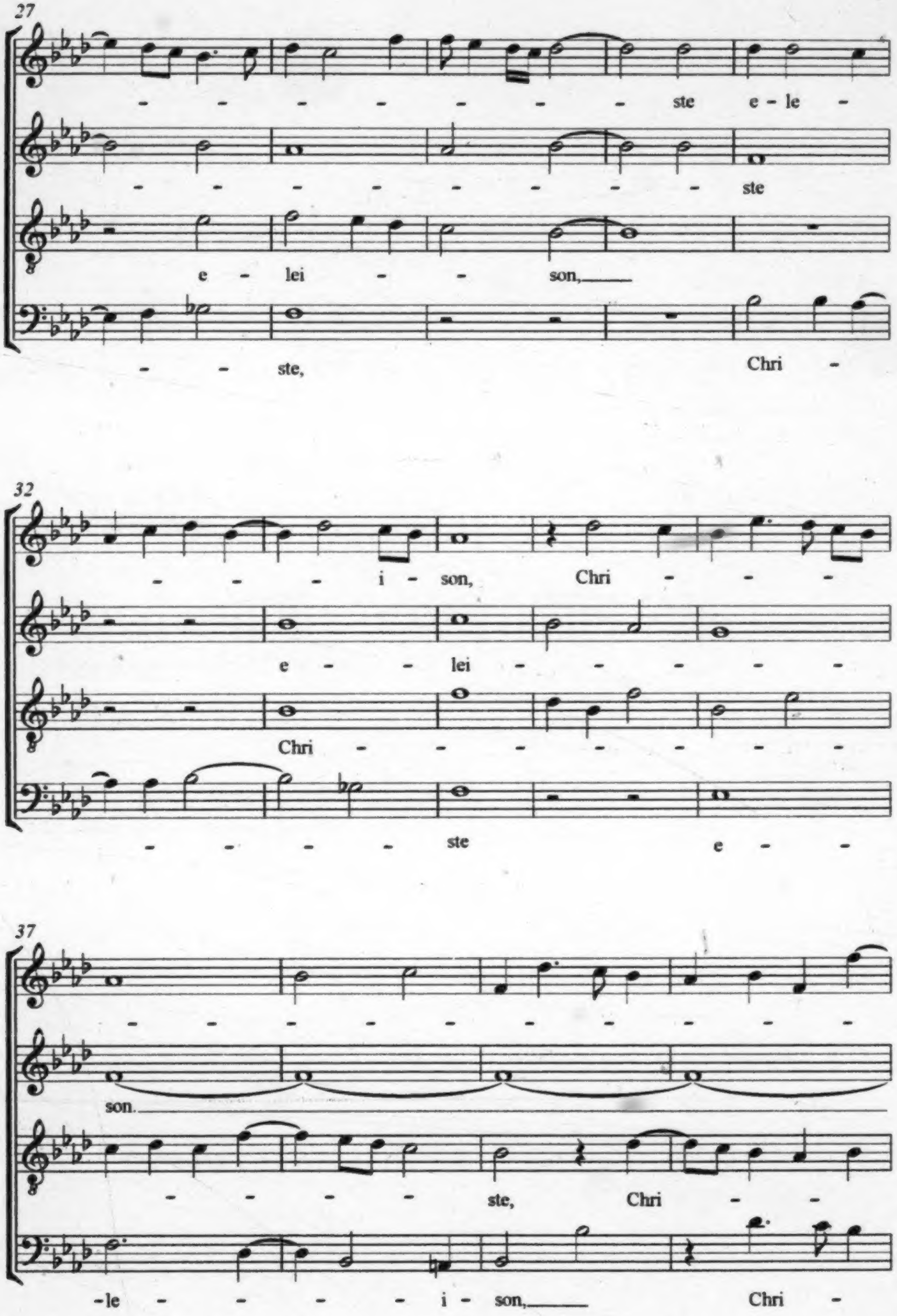
Kyrie

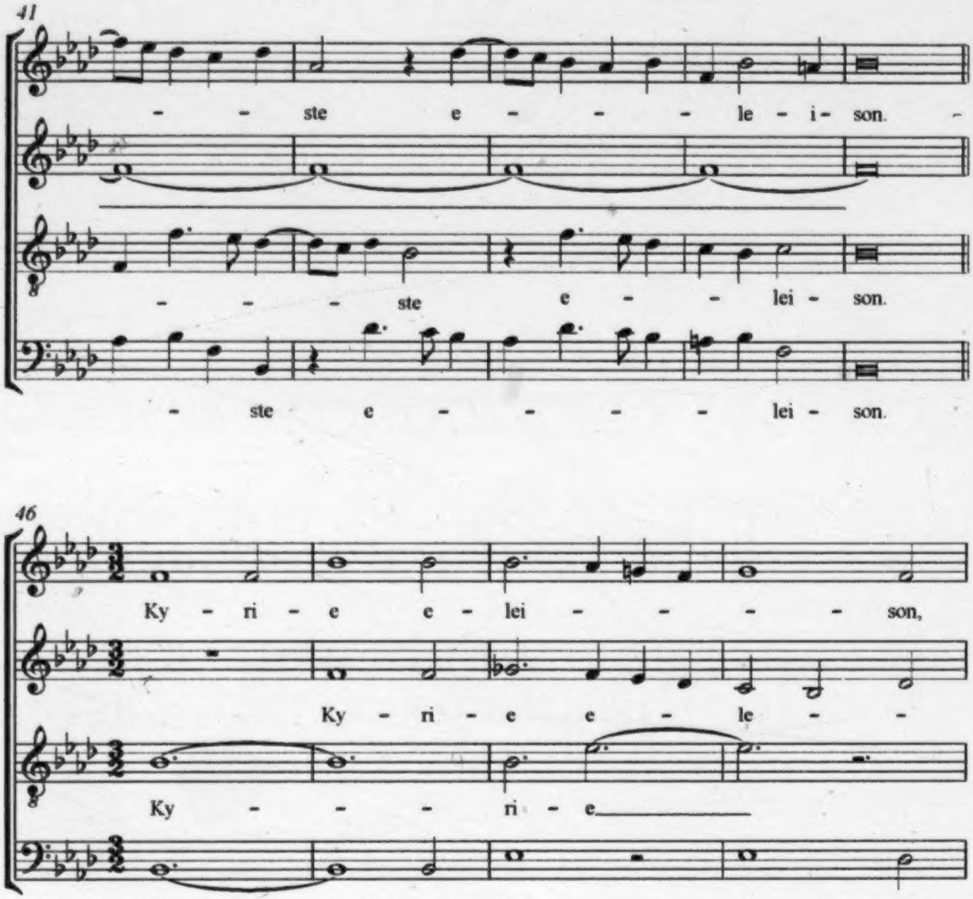

[Discantus]
[Contratenor]
[Tenor]
[Bassus]
Ky - - ri - e e - - le - - - - - - - - - - - i - son, e - - lei - son,
Ky - ri - e e - - - - - - - - le - i - son, — Ky - - - -
Ky - - - - - -ri - - - - - e e - - - - - - le - i - son,
Ky - - - ri - - -e e - - - - - - - -le - i - son,
2
3

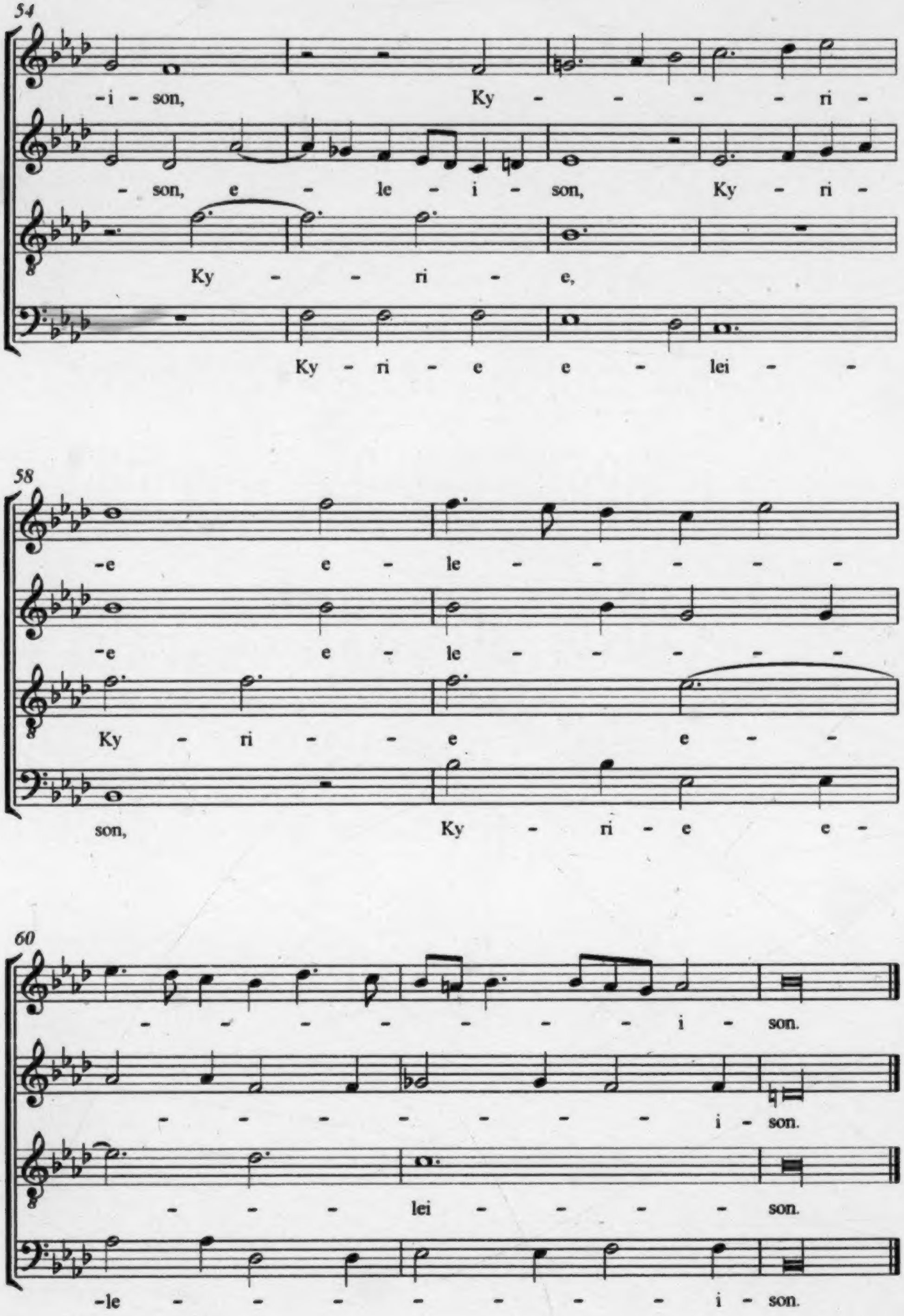

4
Ky - - - - - - - ri - e, Ky -
- - - ri - - e______ e -
Ky -
5
- - - - - - - ri - e e -
- - - - - - - le - i - son.
- ri - e e - - le - i - son,
6
- le - - - - - - - - i -
Ky - - ri - e e - - lei - -
Ky -
Ky - ri - e______ e - le - i - son,


7
son, Ky - - - - - - - -
son, Ky - ri - e e - le - i -
- ri - e e - le - - - - - -
Ky - - - - - - - ri -
8
- ri - e e - le - - - - i - son, e -
son.
- son, Ky - ri - e e - le -
-e e - le - - - - -
9
-le - i - son.
Chri -
- i-son, e - le - i-son.
- i- son.
Chri - - - -

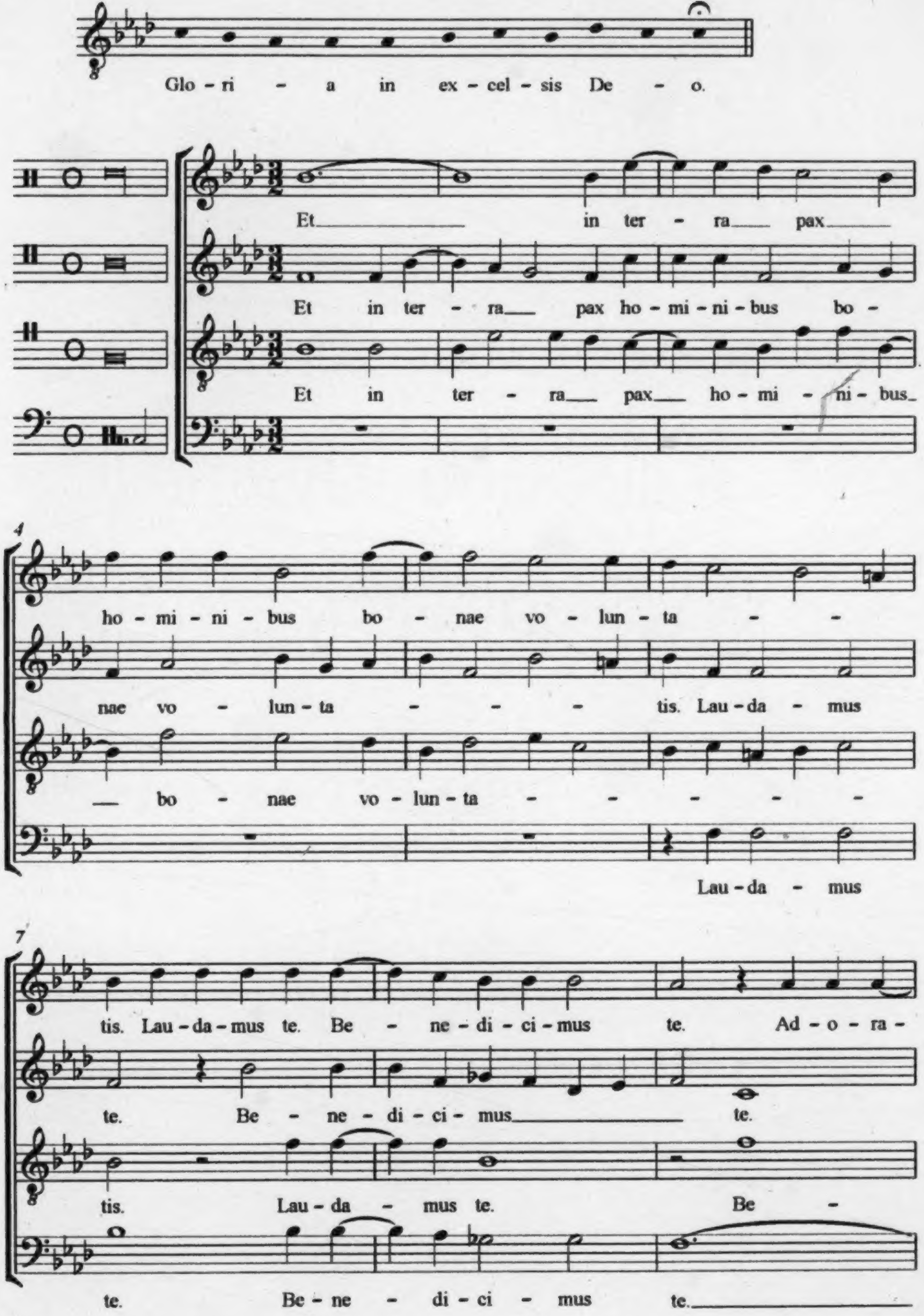

12
- - - - ste, Chri - -
ste, Chri - - - - - - - -
17
- - - - - - ste___ e - le - i -
- - - - - - - ste e - le - i -
22
son, Chri - - - ste, Chri - -
Chri - - - ste,___ Chri -
Chri - ste, Chri - - - ste
son,___ Chri - - -

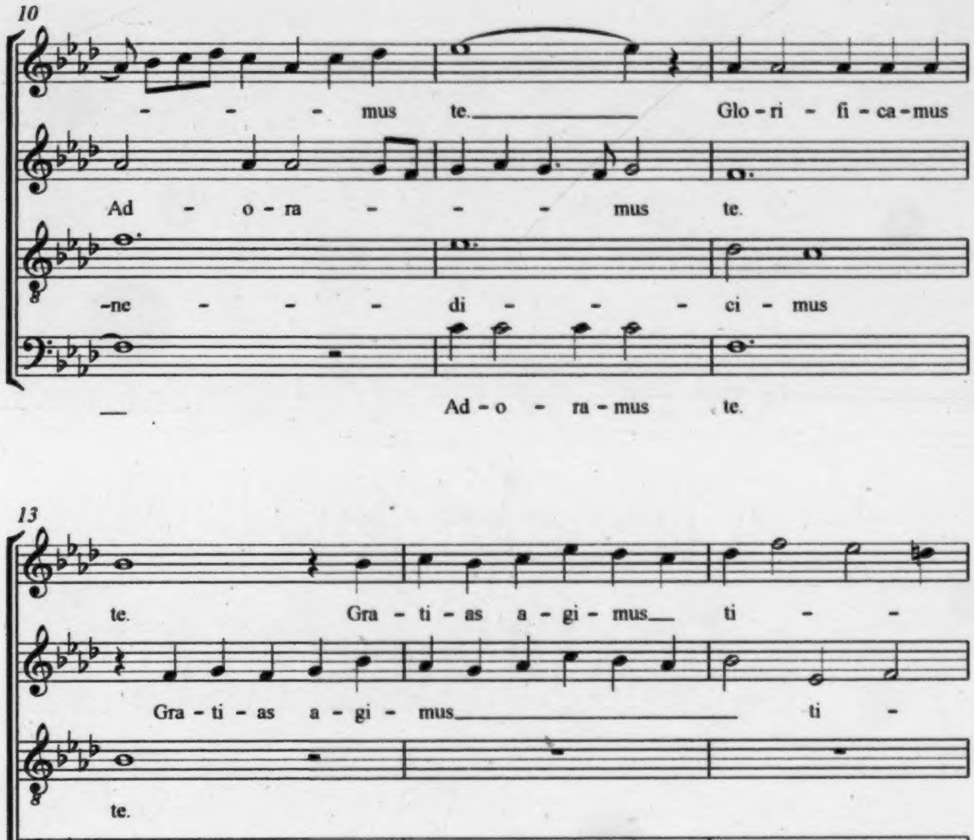

27
- - - - - - - ste e - le -
- - - - - - - - - - ste
e - lei - - son,
- - ste, Chri -
32
- - - i - son, Chri - - -
e - - lei - - - - - -
Chri - - - - - - - -
- - - - ste e - -
37
- - - - - - - - - -
son.
- - - - ste, Chri - -
-le - - - - i - son, Chri -

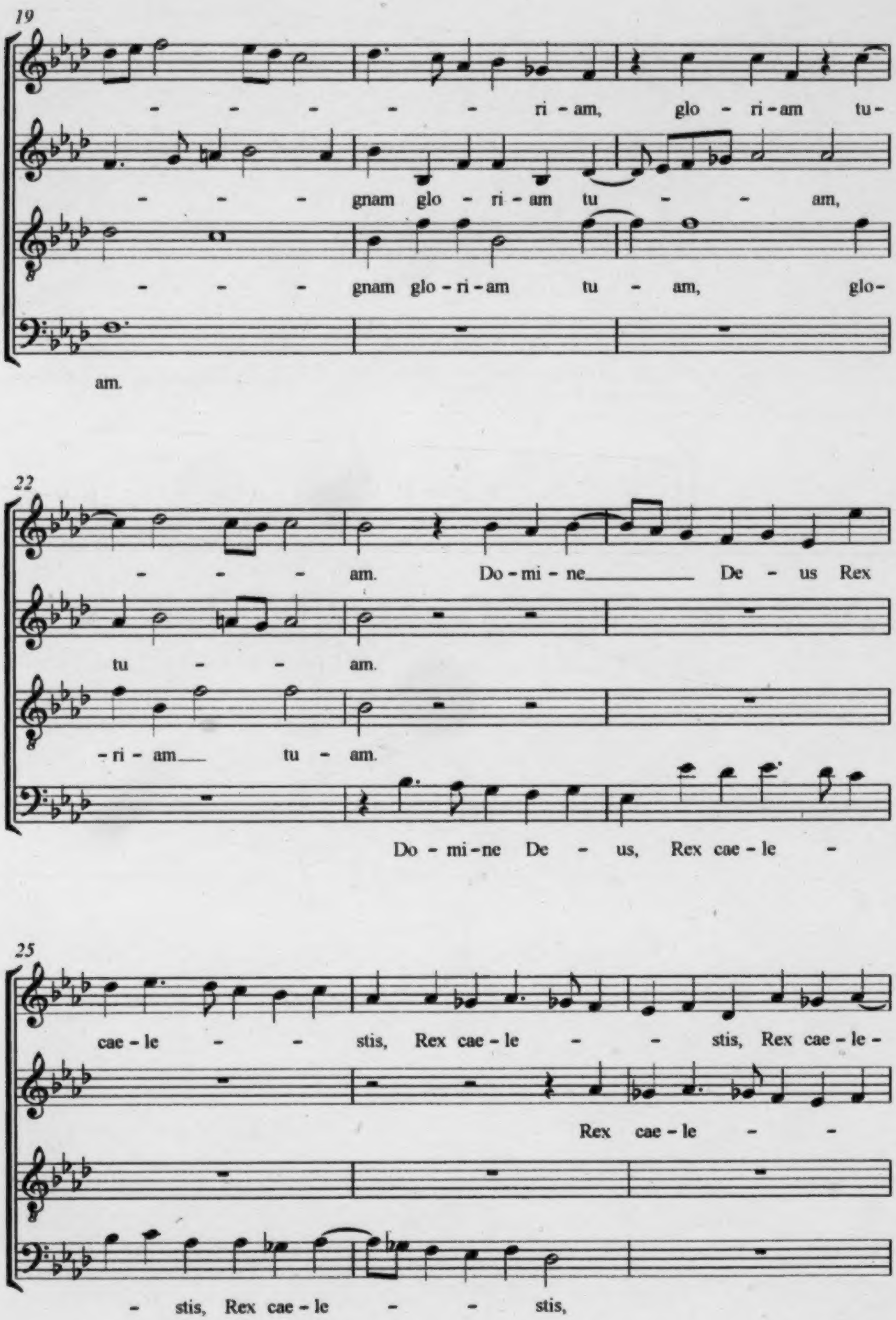

41
- - ste e - - - le - i- son. -
- - - ste e - - lei - son.
- ste e - - - - - lei - son.
46
Ky - ri - e e - lei - - - son,
Ky - ri - e e - le - -
Ky - - - ri - e
Ky - - ri - e e - -
50
Ky - ri - e e - le - - -
- - i - son, Ky - ri - e e - lei - -
e - - - le - - i - son,
-le - i - son, Ky - ri - e,

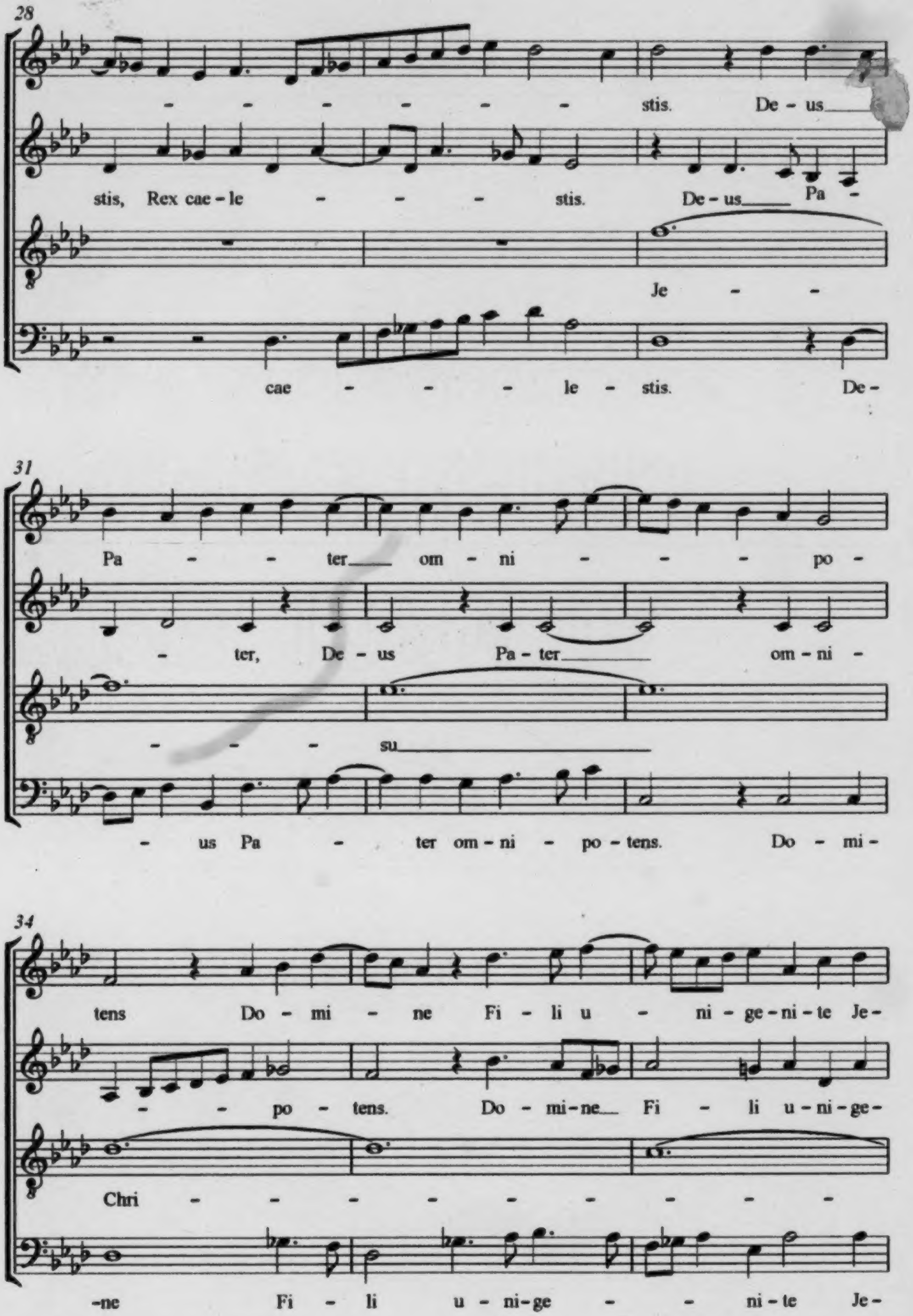

54
-i - son, Ky - - - - ri -
- son, e - le - i - son, Ky - ri -
Ky - - ri - e,
Ky - ri - e e - lei - -
58
-e e - le - - - - -
-e e - le - - - - -
Ky - ri - - e e - -
son, Ky - ri - e e -
60
- - - - - - - - i - son.
- - - - - - - i - son.
- - - lei - - - - son.
-le - - - - - - - i - son.

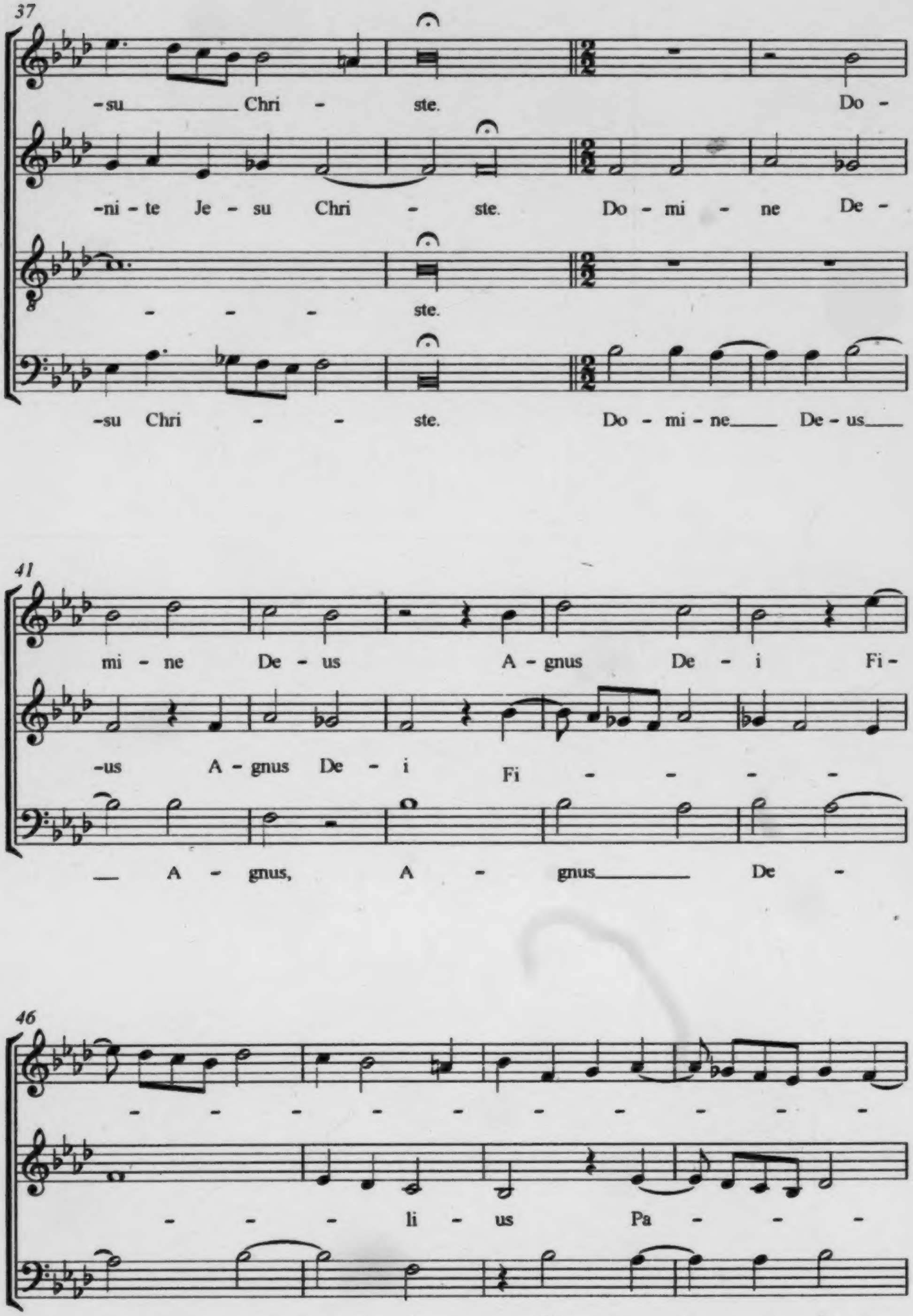
Gloria

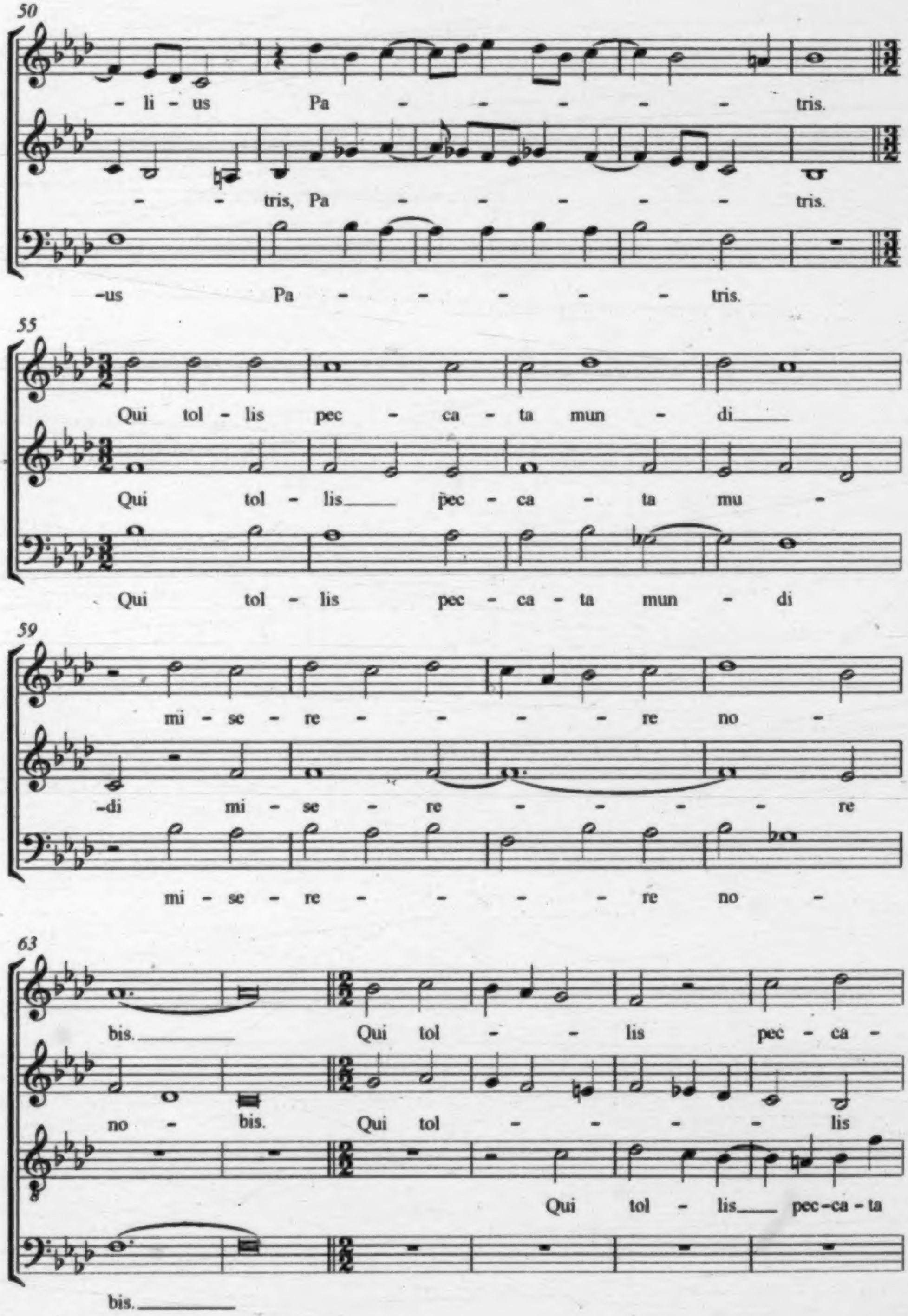

Glo - ri - a in ex - cel - sis De - o.
Et in ter - ra pax
Et in ter - ra pax ho - mi - ni - bus bo -
Et in ter - ra pax ho - mi - ni - bus
4
ho - mi - ni - bus bo - nae vo - lun - ta - -
nae vo - lun - ta - - - tis. Lau - da - mus
bo - nae vo - lun - ta - - - - -
Lau - da - mus
7
tis. Lau - da - mus te. Be - ne - di - ci - mus te. Ad - o - ra -
te. Be - ne - di - ci - mus te.
tis. Lau - da - mus te. Be -
te. Be - ne - di - ci - mus te.

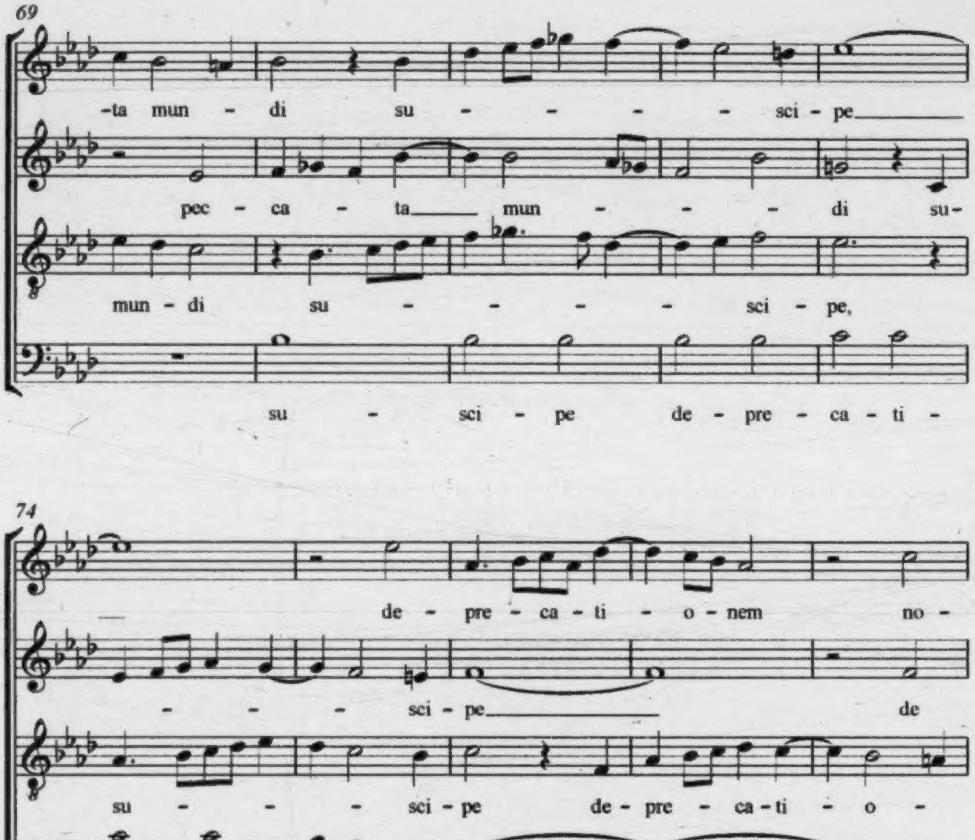

10
- - - mus te. Glo - ri - fi - ca - mus
Ad - o - ra - - - mus te.
-ne - - - di - - - ci - mus
Ad - o - ra - mus te.
13
te. Gra - ti - as a - gi - mus ti - -
Gra - ti - as a - gi - mus ti -
te.
16
-bi pro - pter ma - gnam glo - - -
-bi pro - - pter ma -
pro - pter ma - - -
Pro - pter ma - gnam glo - ri - - -

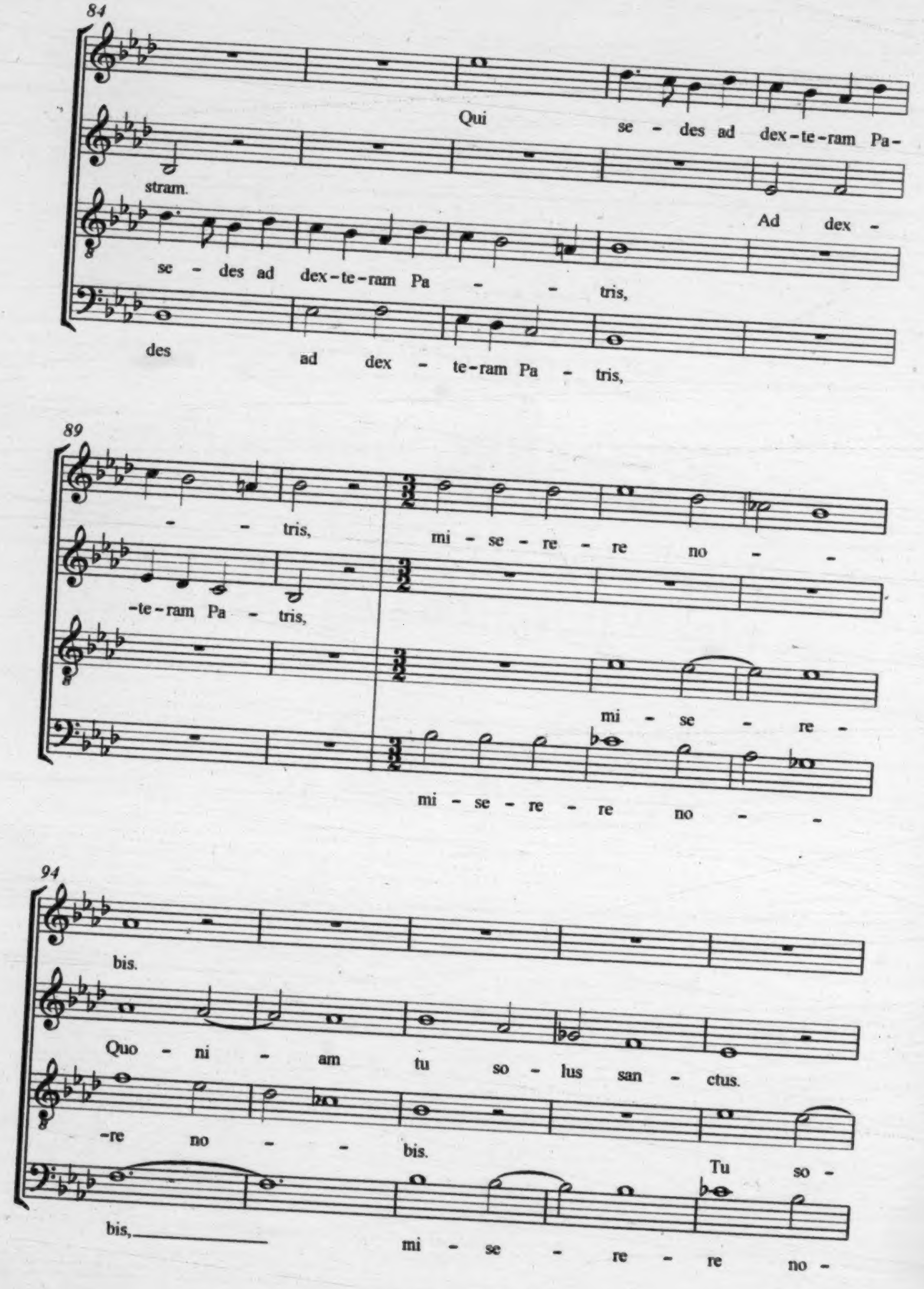

19
- - - - - - ri - am, glo - ri - am tu-
- - - gnam glo - ri - am tu - - - am,
- - - gnam glo - ri - am tu - am, glo-
am.
22
- - - am. Do - mi - ne De - us Rex
tu - - - am.
- ri - am tu - am.
Do - mi - ne De - us, Rex cae - le -
25
cae - le - - stis, Rex cae - le - - stis, Rex cae - le -
Rex cae - le - -
- stis, Rex cae - le - - stis,

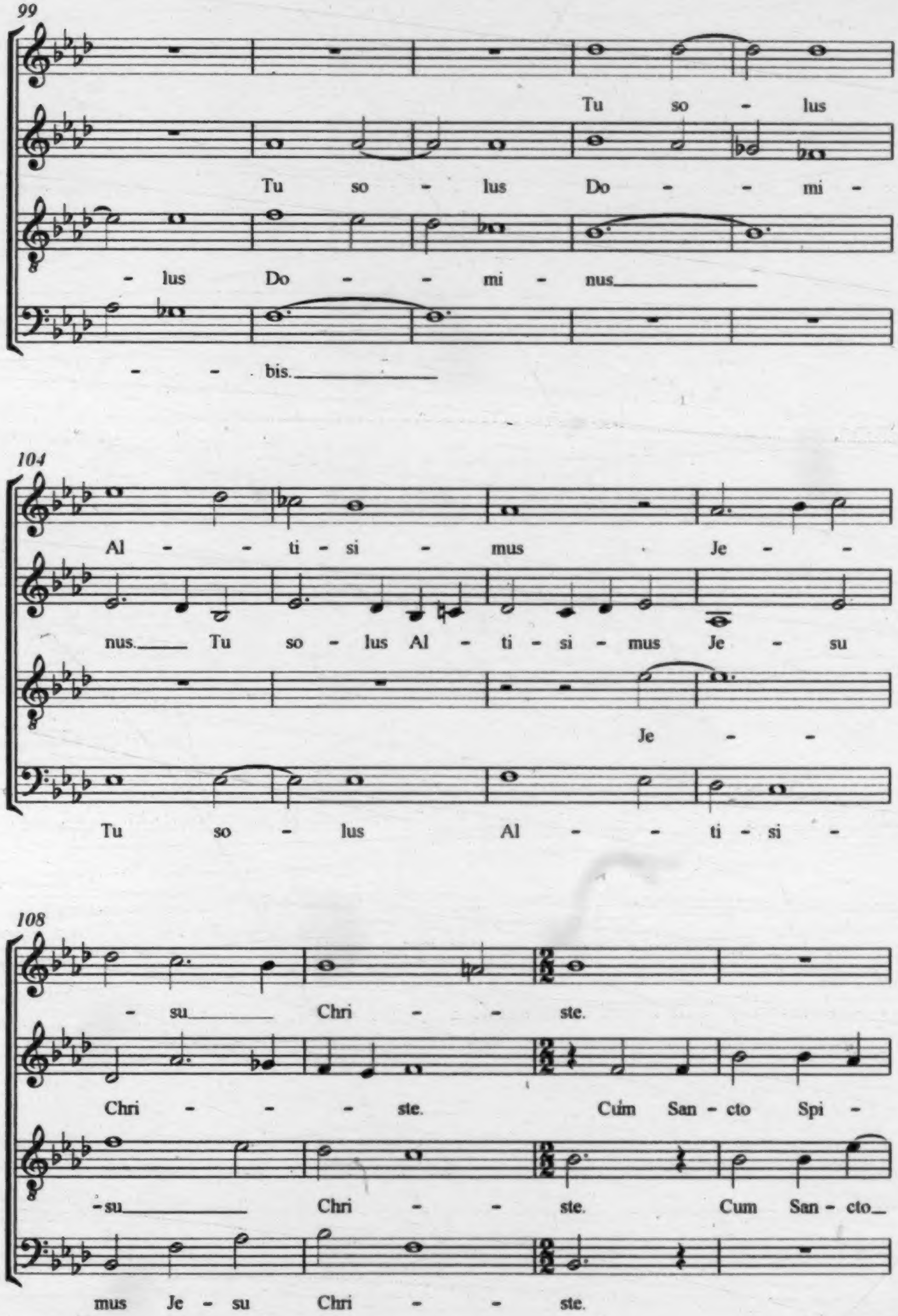

28
- - - - - - - stis. De - us
stis, Rex cae - le - - - - stis. De - us Pa -
Je - -
cae - - - - le - stis. De -
31
Pa - - - ter om - ni - - - po -
- ter, De - us Pa - ter om - ni -
- - - su
- us Pa - ter om - ni - po - tens. Do - mi -
34
tens Do - mi - ne Fi - li u - ni - ge - ni - te Je -
- - po - tens. Do - mi - ne Fi - li u - ni - ge -
Chri - - - - - - - - -
-ne Fi - li u - ni - ge - - ni - te Je -

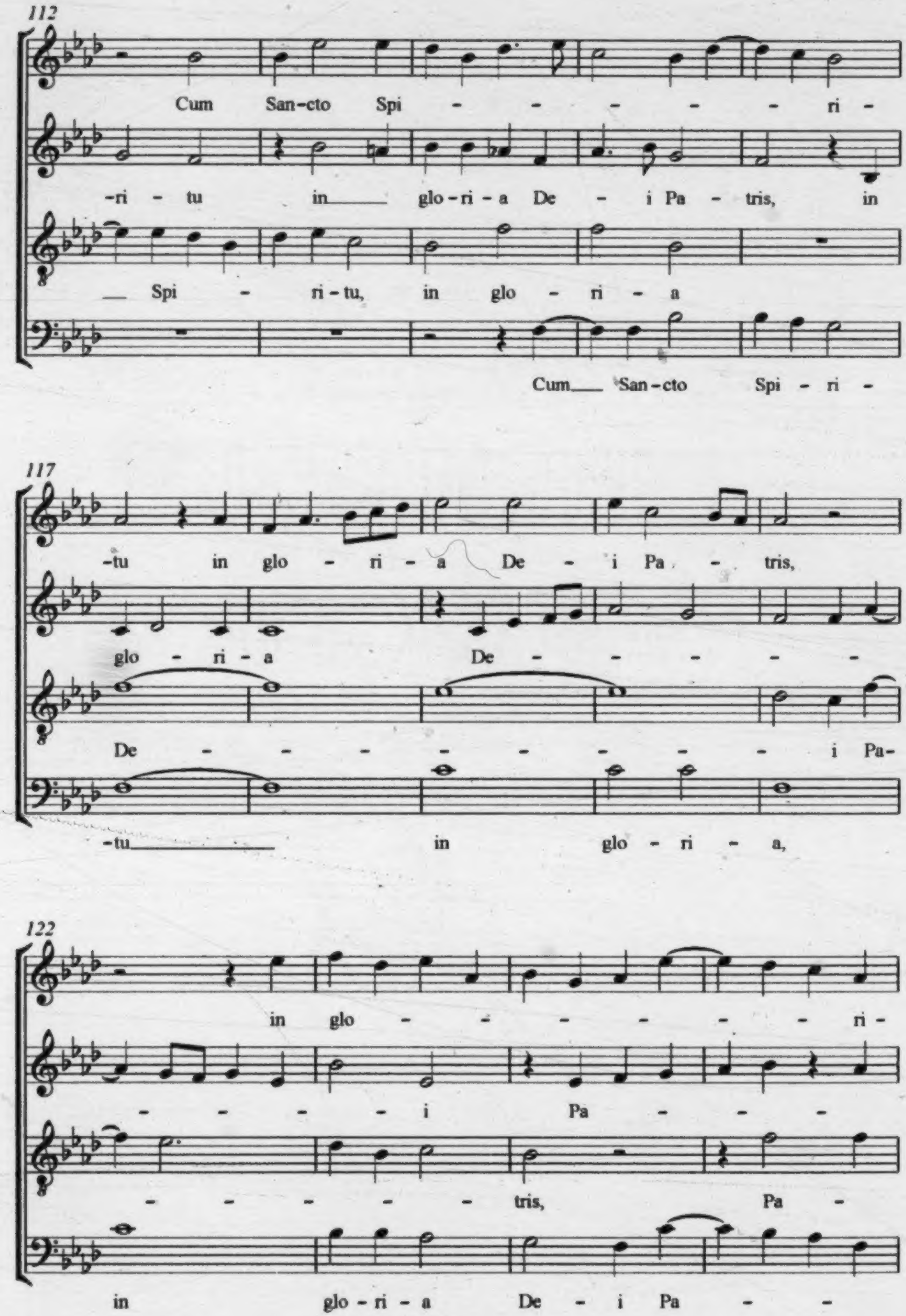

37
-su Chri - ste. Do -
-ni - te Je - su Chri - ste. Do - mi - ne De -
- - - ste.
-su Chri - - ste. Do - mi - ne De - us
41
mi - ne De - us A - gnus De - i Fi -
-us A - gnus De - i Fi - - - - -
A - gnus, A - gnus De -
46
- - - - - - - - - - - - - - -
- - - - li - us Pa - - - -
- - - i Fi - - - li -

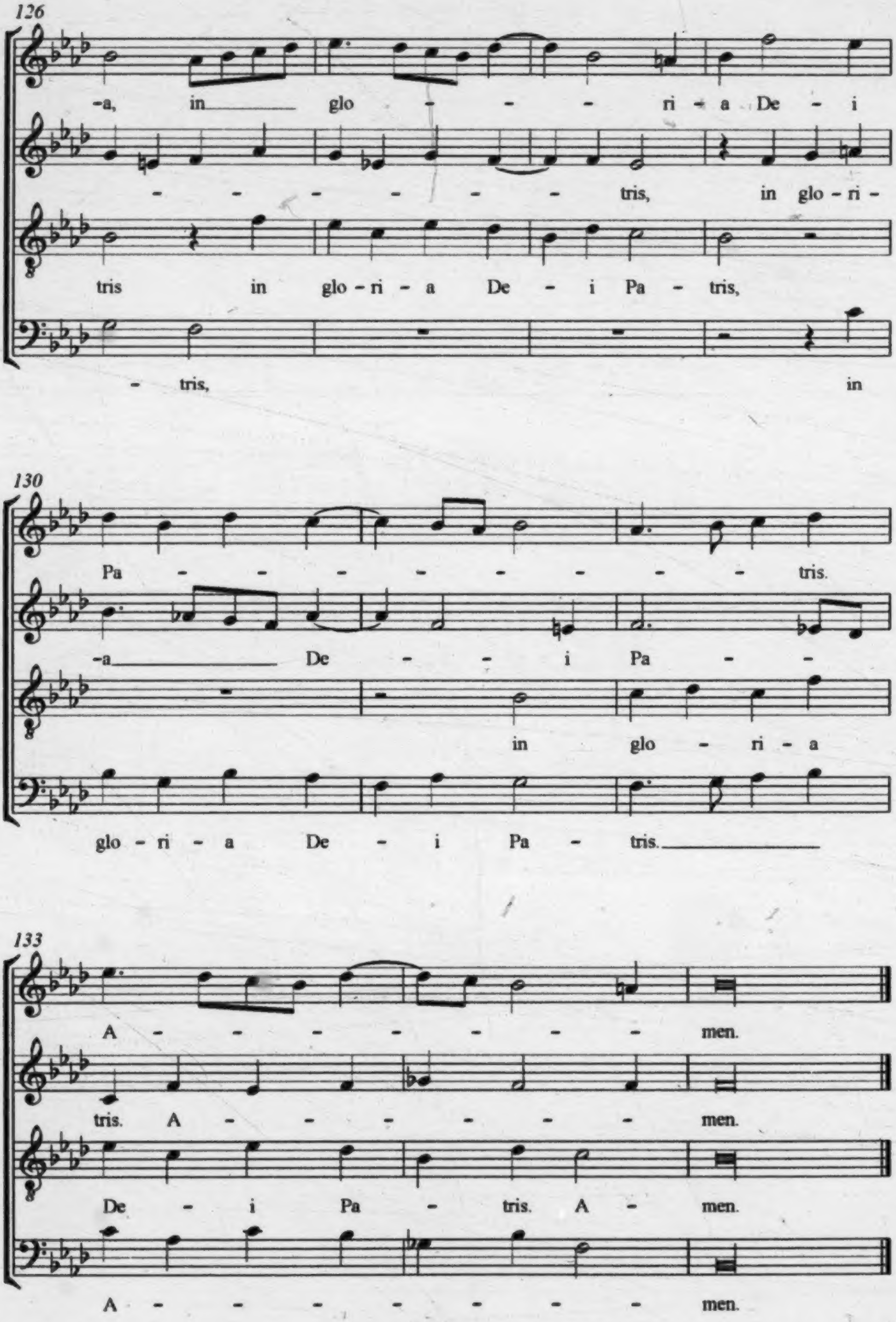

50
- li - us Pa - - - - - - tris.
- - tris, Pa - - - - - - tris.
-us Pa - - - - - tris.
55
Qui tol - lis pec - ca - ta mun - di
Qui tol - lis pec - ca - ta mu -
Qui tol - lis pec - ca - ta mun - di
59
mi - se - re - - - - re no -
-di mi - se - re - - - - - re
mi - se - re - - - - re no -
63
bis.
no - bis. Qui tol - - - - lis
Qui tol - - lis pec - ca -
Qui tol - lis pec - ca - ta
bis.


69
-ta mun - di su - - - - sci - pe
pec - ca - ta mun - - - di su-
mun - di su - - - - sci - pe,
su - sci - pe de - pre - ca - ti -
74
de - pre - ca - ti - o - nem no -
- - - sci - pe de
su - - - sci - pe de - pre - ca - ti - o -
-o - nem no - stram.
79
- - - - stram.
pre - ca - ti - o - nem no - -
nem no - - - - - stram. Qui
Qui se - -

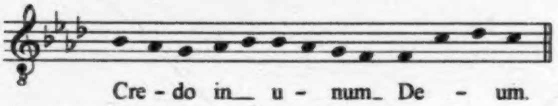

84
Qui se - des ad dex - te - ram Pa -
stram.
se - des ad dex - te - ram Pa - - tris, Ad dex -
des ad dex - te - ram Pa - tris,
89
- - tris, mi - se - re - re no - -
-te - ram Pa - tris,
mi - se - re -
mi - se - re - re no - -
94
bis.
Quo - ni - am tu so - lus san - ctus.
-re no - - bis. Tu so -
bis, mi - se - re - re no -

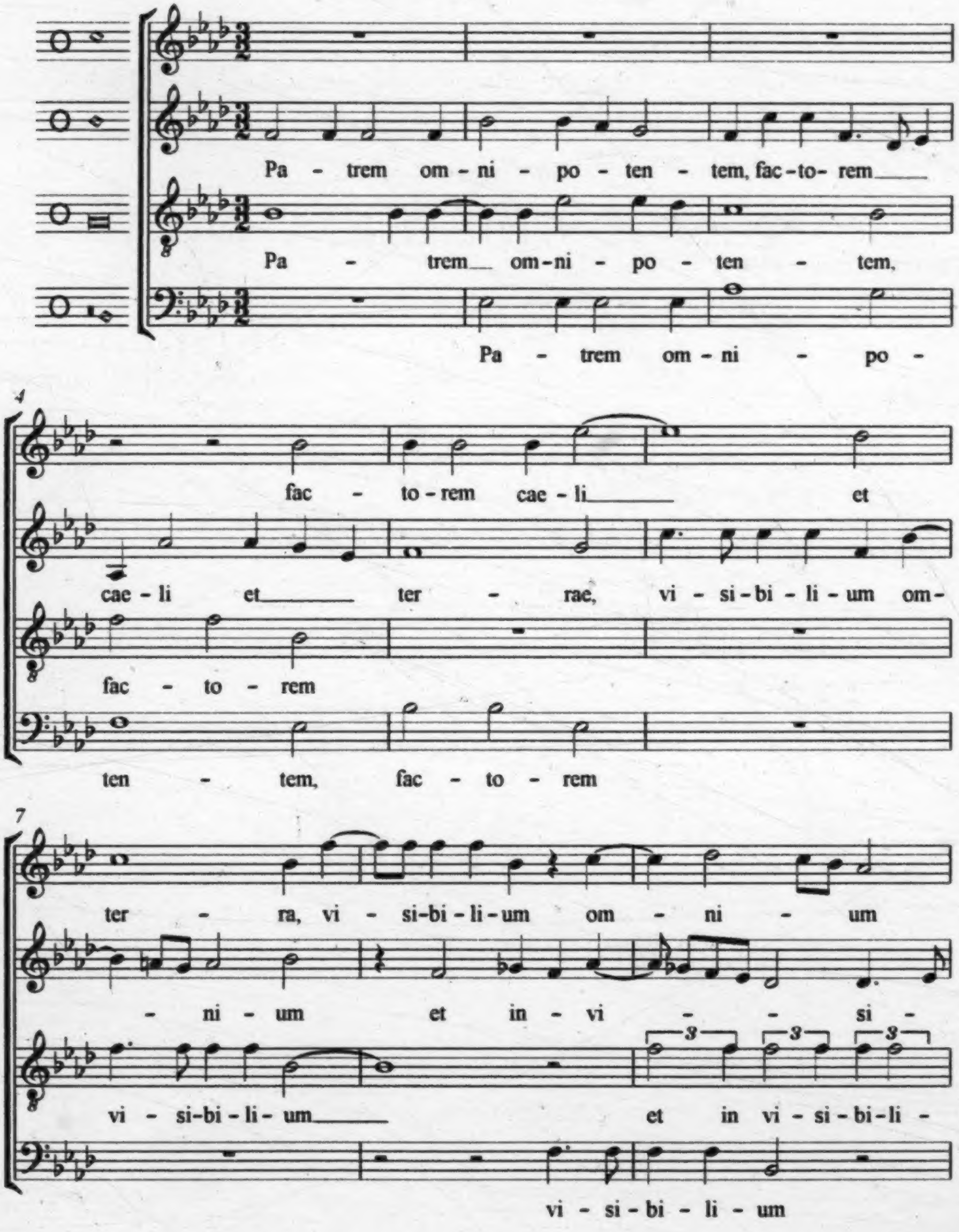

99
Tu so - lus
Tu so - lus Do - - mi -
- lus Do - - mi - nus
- - bis.
104
Al - - ti - si - mus Je - -
nus. Tu so - lus Al - ti - si - mus Je - su
Je - -
Tu so - lus Al - - ti - si -
108
- su Chri - - ste.
Chri - - - ste. Cum San - cto Spi -
-su Chri - - ste. Cum San - cto
mus Je - su Chri - - ste.

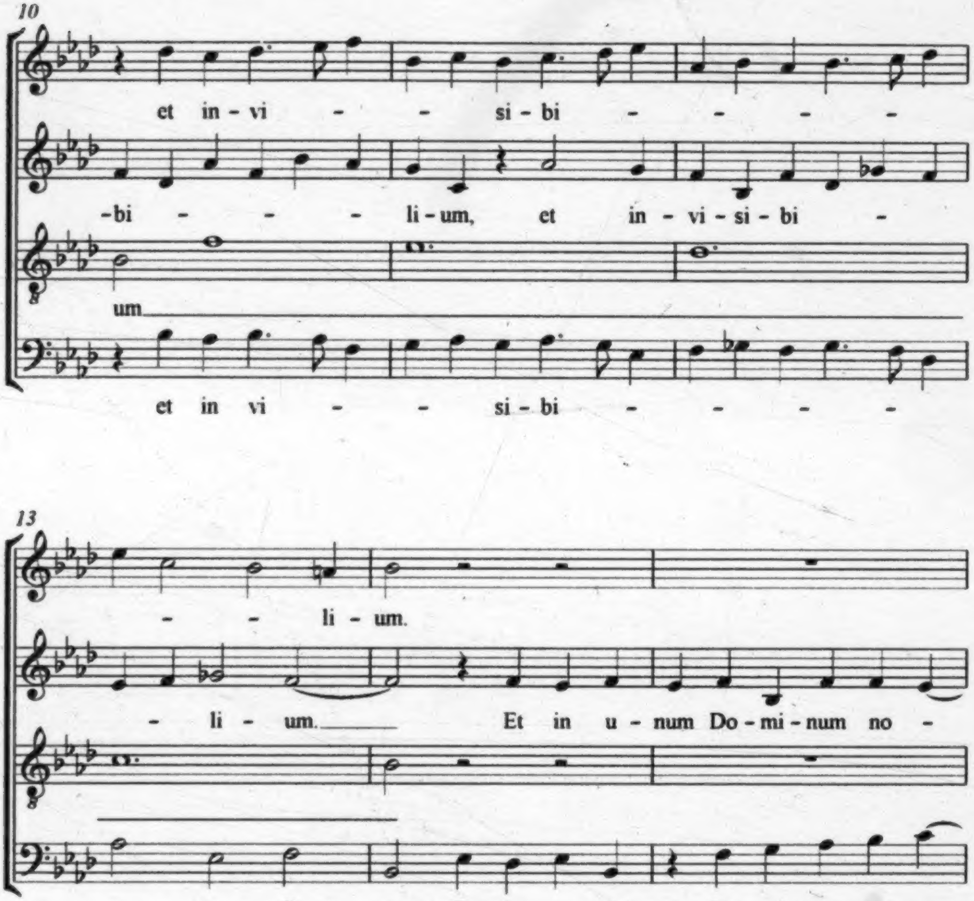

112
Cum San-cto Spi - - - - - ri -
-ri - tu in glo-ri-a De - i Pa - tris, in
Spi - ri-tu, in glo - ri - a
Cum San-cto Spi - ri -
117
-tu in glo - ri - a De - i Pa - tris,
glo - ri - a De - - - - -
De - - - - - - - - i Pa-
-tu in glo - ri - a,
122
in glo - - - - - - ri-
- - - - i Pa - - - -
- - - - - tris, Pa -
in glo-ri-a De - i Pa - -

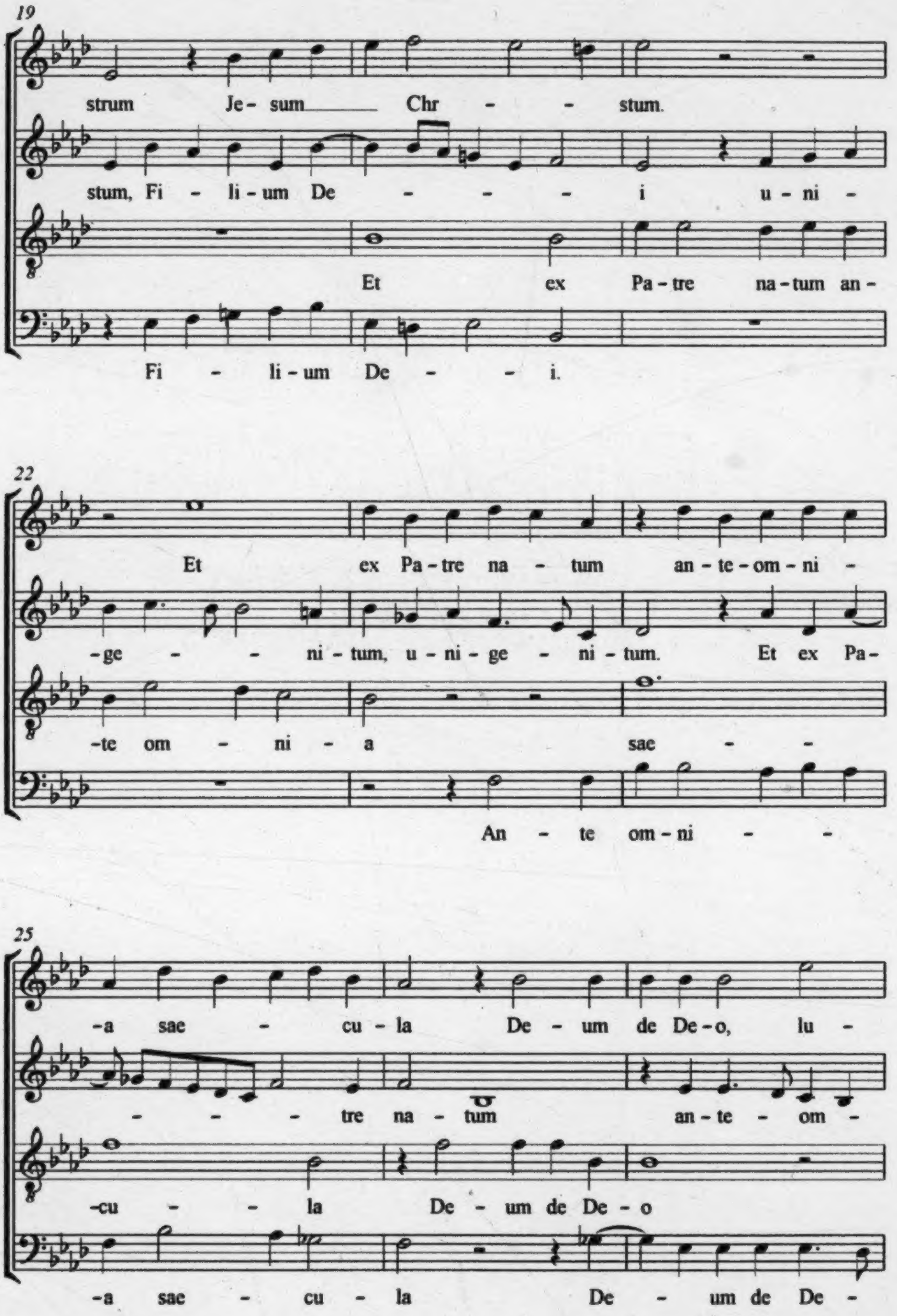

126
-a, in glo - - - ri - a De - i
- - - - - - - tris, in glo - ri -
tris in glo - ri - a De - i Pa - tris,
- tris, in
130
Pa - - - - - - - - tris.
-a De - - i Pa - -
in glo - ri - a
glo - ri - a De - i Pa - tris.
133
A - - - - - - - men.
tris. A - - - - - - men.
De - i Pa - tris. A - men.
A - - - - - - - men.

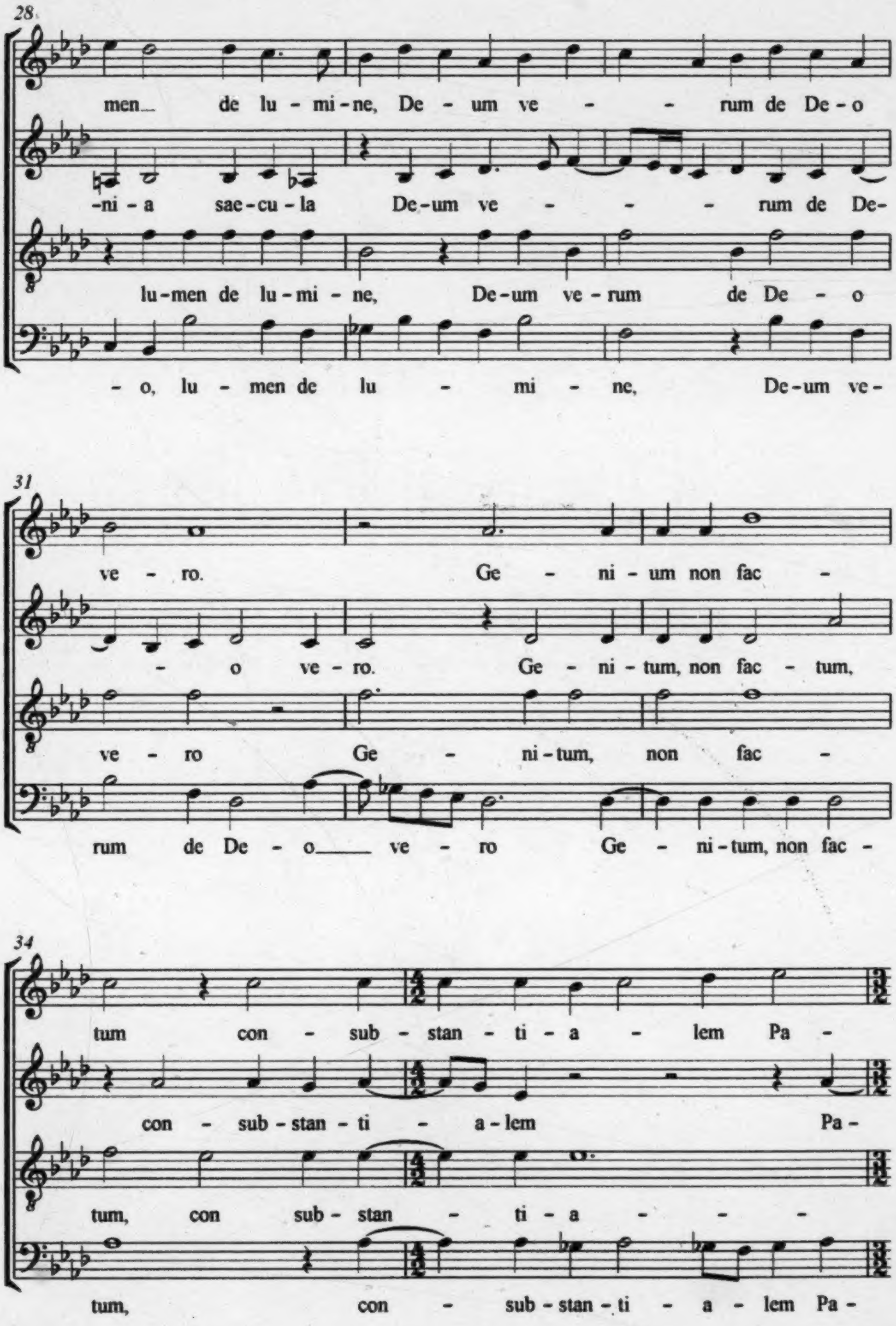
Credo

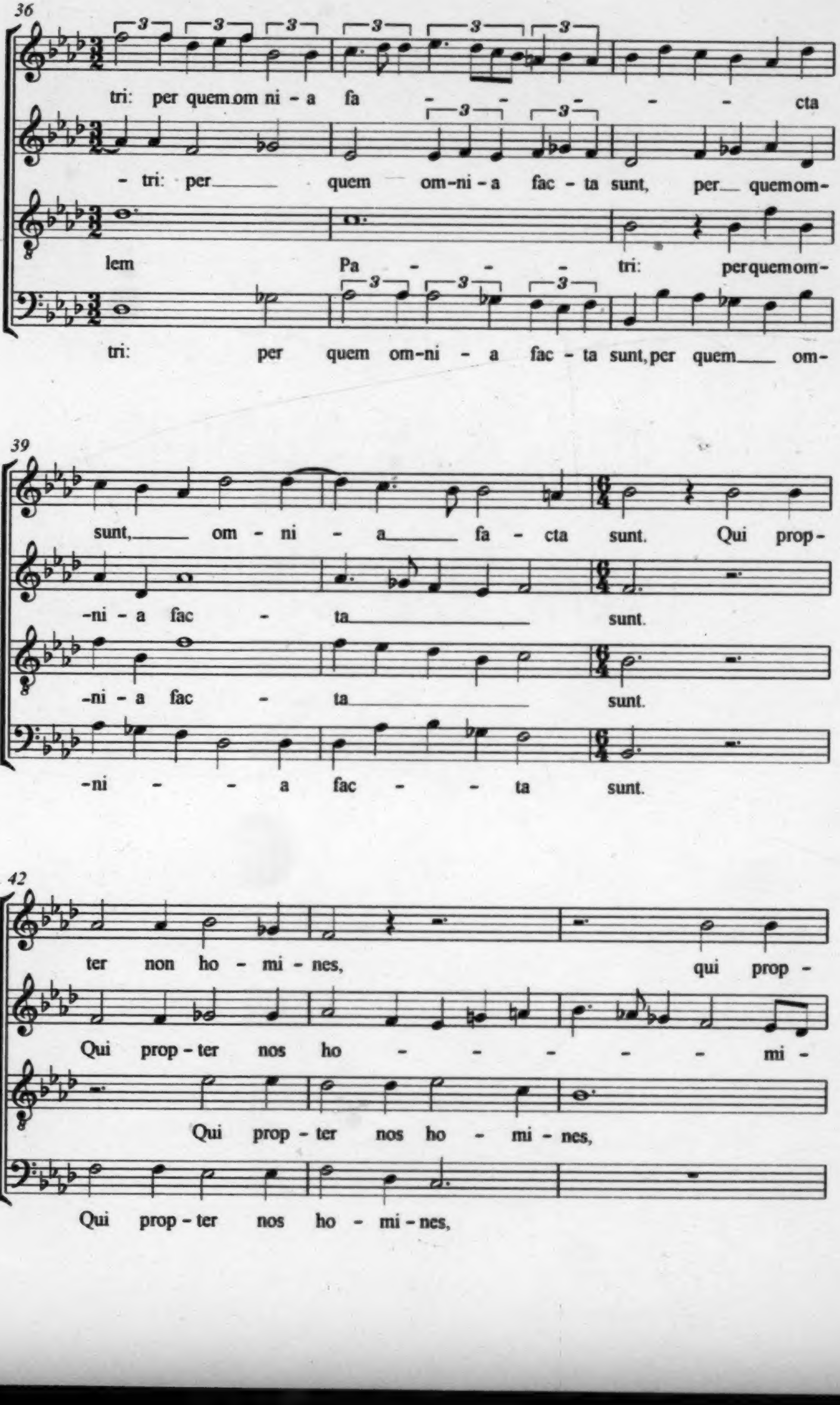

Cre - do in_ u - num_ De - um.

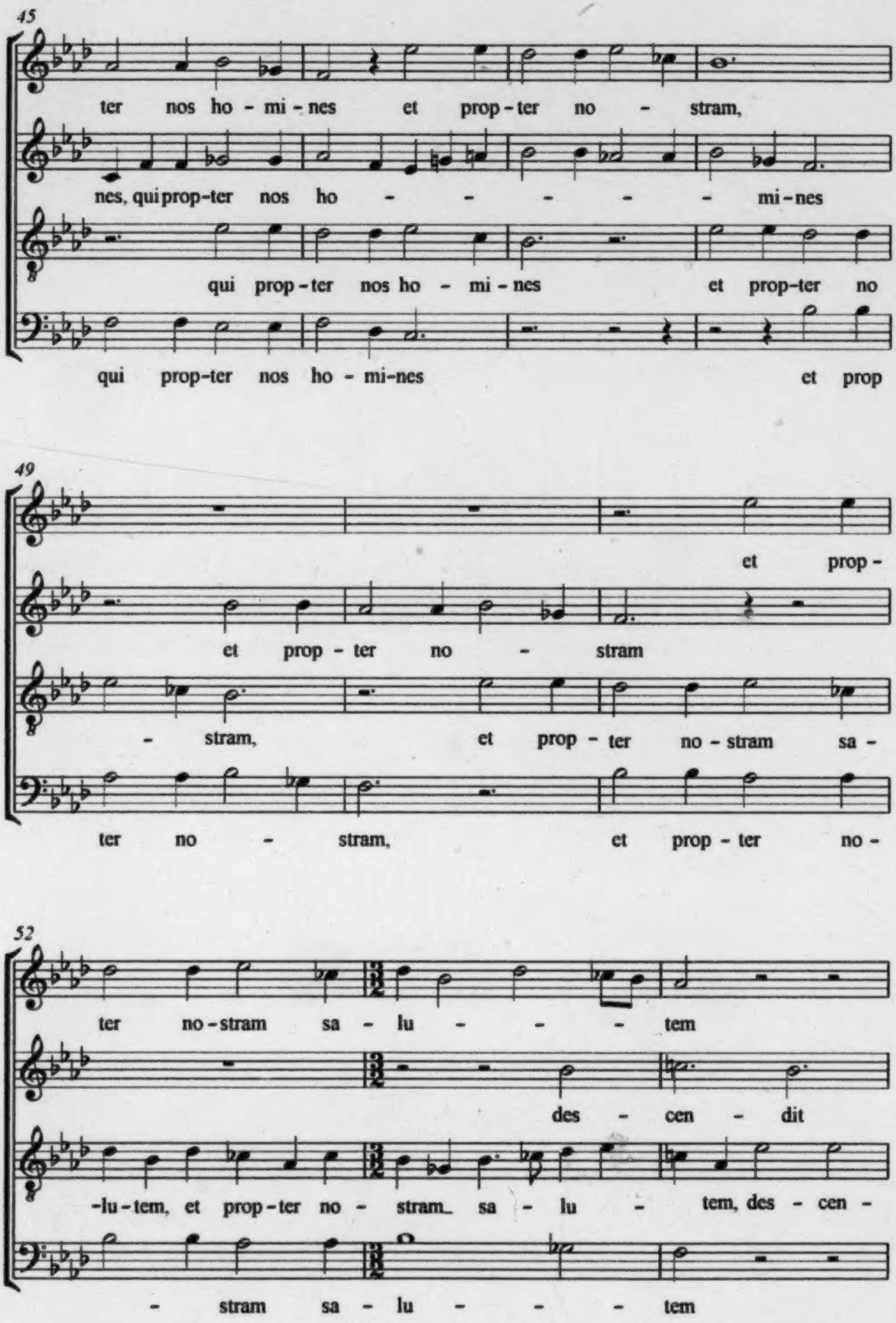

Pa - trem om - ni - po - ten - tem, fac - to - rem
Pa - trem_ om - ni - po - ten - tem,
Pa - trem om - ni - po -
4
fac - to - rem cae - li_ et
cae - li et_ ter - rae, vi - si - bi - li - um om -
fac - to - rem
ten - tem, fac - to - rem
7
ter - ra, vi - si - bi - li - um om - ni - um
- ni - um et in - vi - si -
vi - si - bi - li - um_ et in vi - si - bi - li -
3
3
3
vi - si - bi - li - um

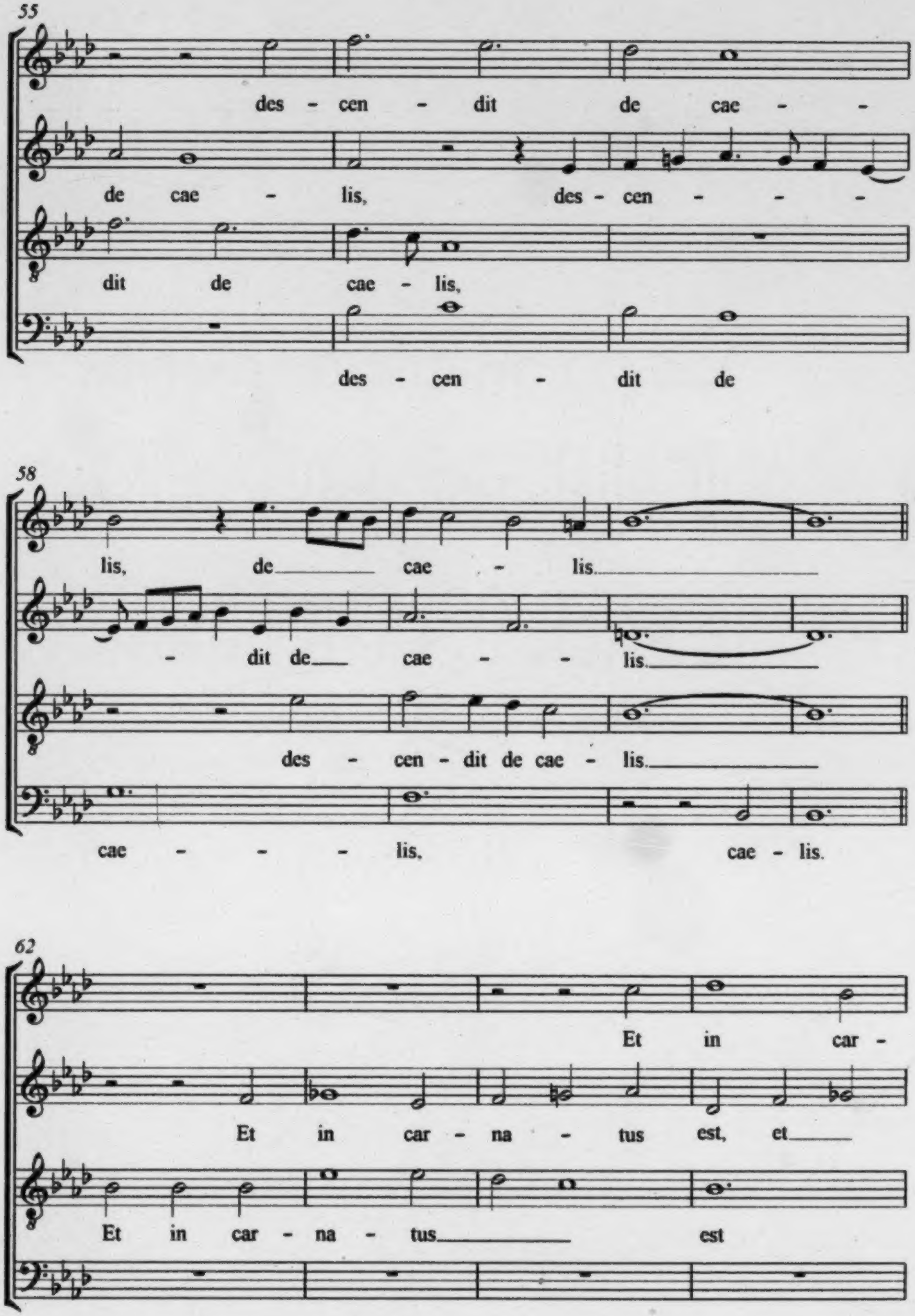

10
et in - vi - - si - bi - - - -
-bi - - - li - um, et in - vi - si - bi -
um
et in vi - - si - bi - - - -
13
- - li - um.
- li - um. Et in u - num Do - mi - num no -
- - li - um. Et in u - num Do - mi - num no -
16
Et in u - num Do - mi - num no -
- strum Je - sum Chri -
- - strum Je - - sum Chri - stum,

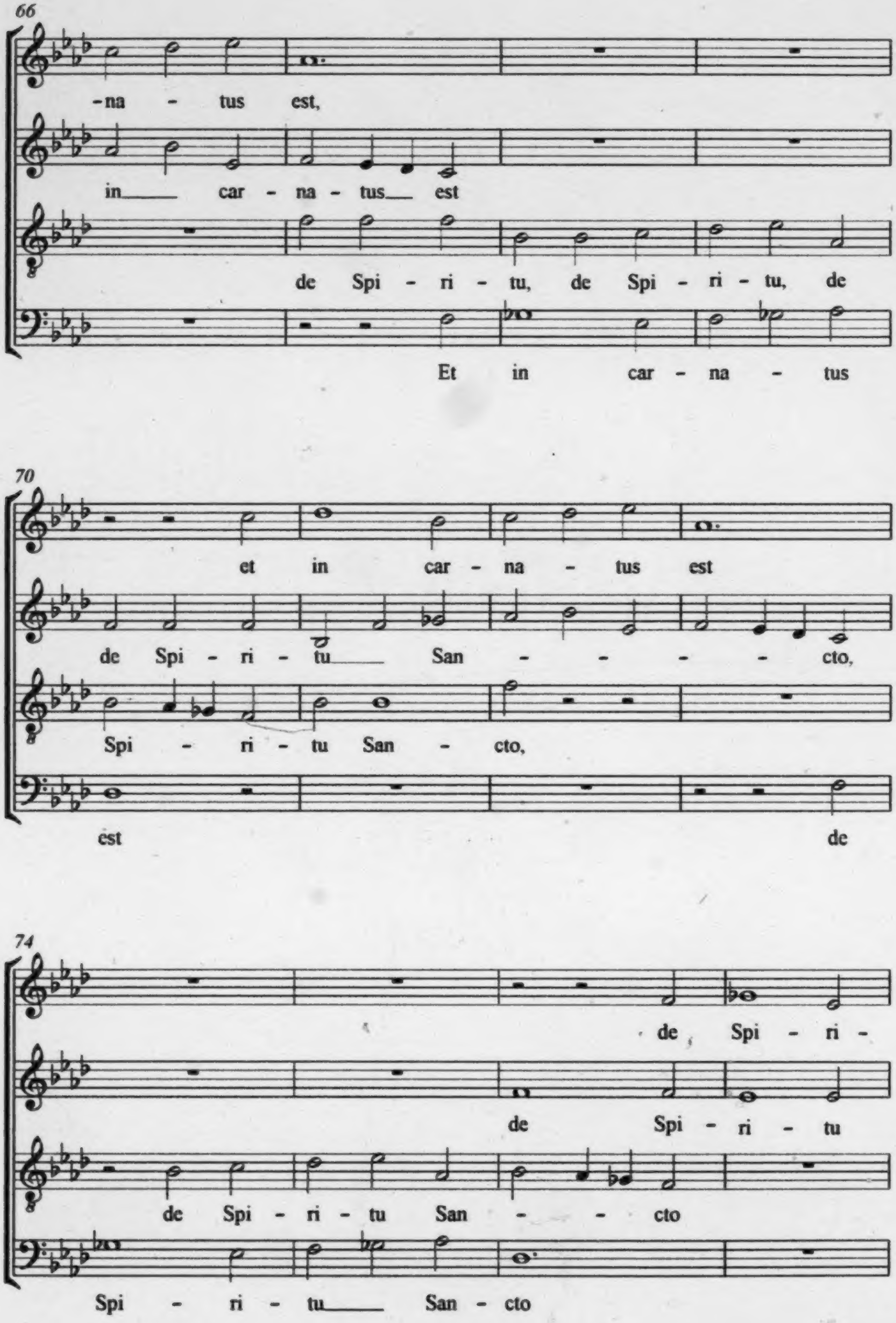

19
strum Je - sum Chr - - stum.
stum, Fi - li - um De - - - - i u - ni -
Et ex Pa - tre na - tum an -
Fi - li - um De - - i.
22
Et ex Pa - tre na - tum an - te - om - ni -
-ge - - ni - tum, u - ni - ge - ni - tum. Et ex Pa -
-te om - ni - a sae - -
An - te om - ni - -
25
-a sae - cu - la De - um de De - o, lu -
- - - tre na - tum an - te - om -
-cu - - la De - um de De - o
-a sae - cu - la De - um de De -

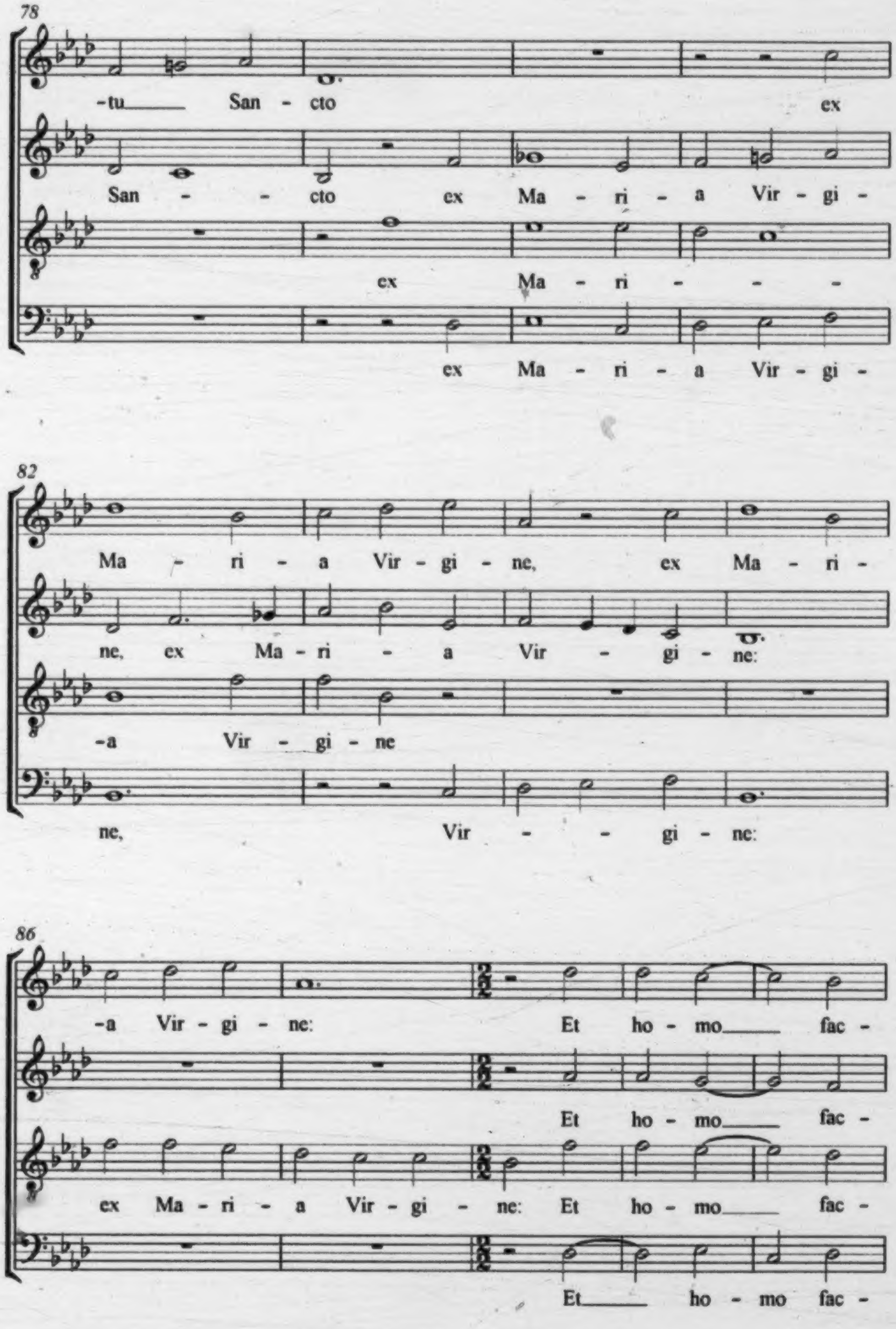

28
men_ de lu-mi-ne, De-um ve - - rum de De-o
-ni-a sae-cu-la De-um ve - - - - rum de De-
lu-men de lu-mi-ne, De-um ve-rum de De - o
- o, lu - men de lu - mi - ne, De-um ve-
31
ve - ro. Ge - ni-um non fac -
- o ve - ro. Ge - ni - tum, non fac - tum,
ve - ro Ge - ni-tum, non fac -
rum de De - o___ ve - ro Ge - ni-tum, non fac -
34
tum con - sub - stan - ti - a - lem Pa -
con - sub-stan-ti - a-lem Pa-
tum, con sub-stan - ti - a - - -
tum, con - sub-stan-ti - a - lem Pa-

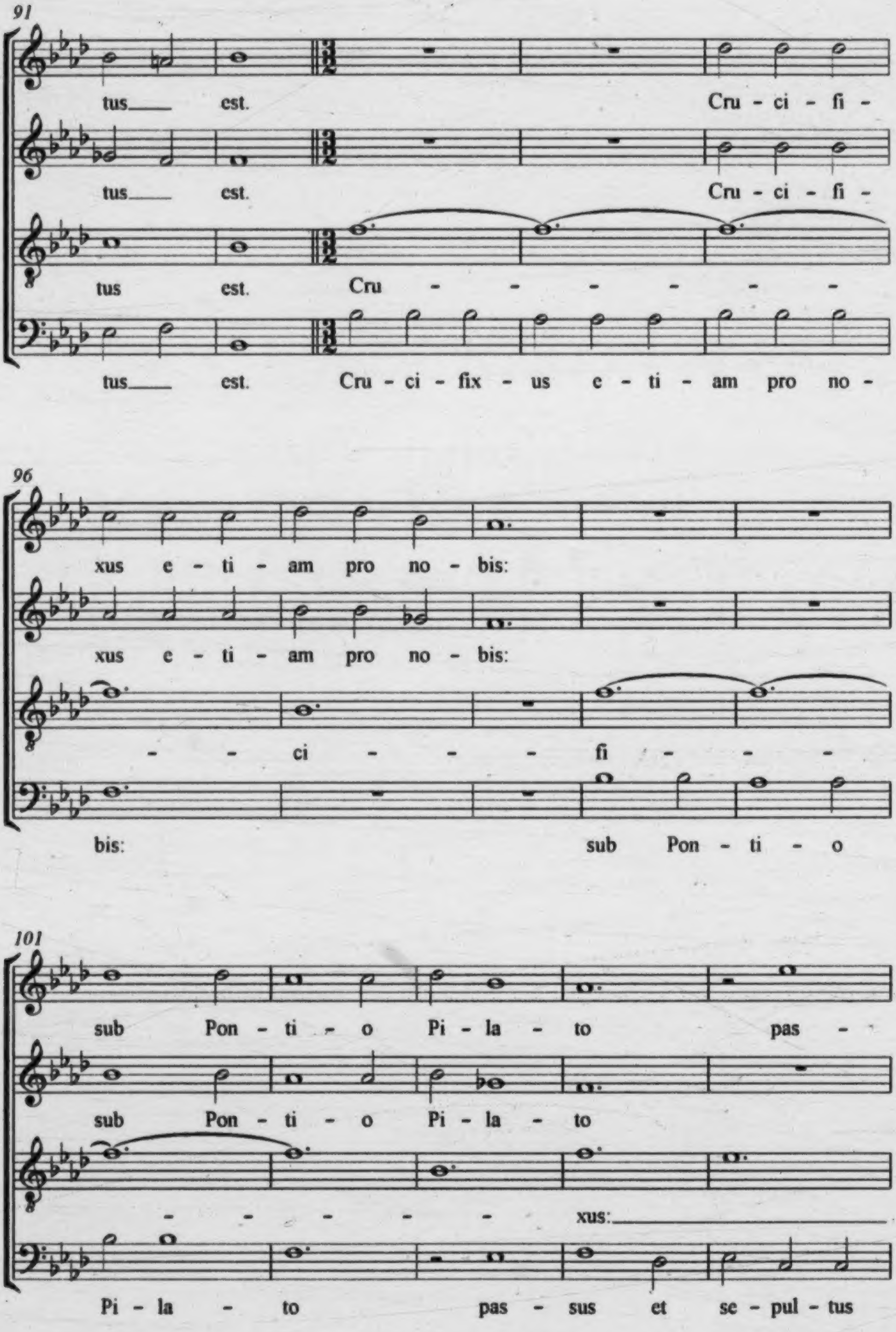

36
tri: per quem om ni - a fa - - - - - cta
- tri: per quem om-ni-a fac-ta sunt, per quem om-
lem Pa - - - - tri: per quem om-
tri: per quem om-ni - a fac-ta sunt, per quem om-
39
sunt, om - ni - a fa - cta sunt. Qui prop-
-ni - a fac - ta sunt.
-ni - a fac - ta sunt.
-ni - - - a fac - - ta sunt.
42
ter non ho - mi - nes, qui prop -
Qui prop - ter nos ho - - - - - mi -
Qui prop - ter nos ho - mi - nes,
Qui prop - ter nos ho - mi - nes,

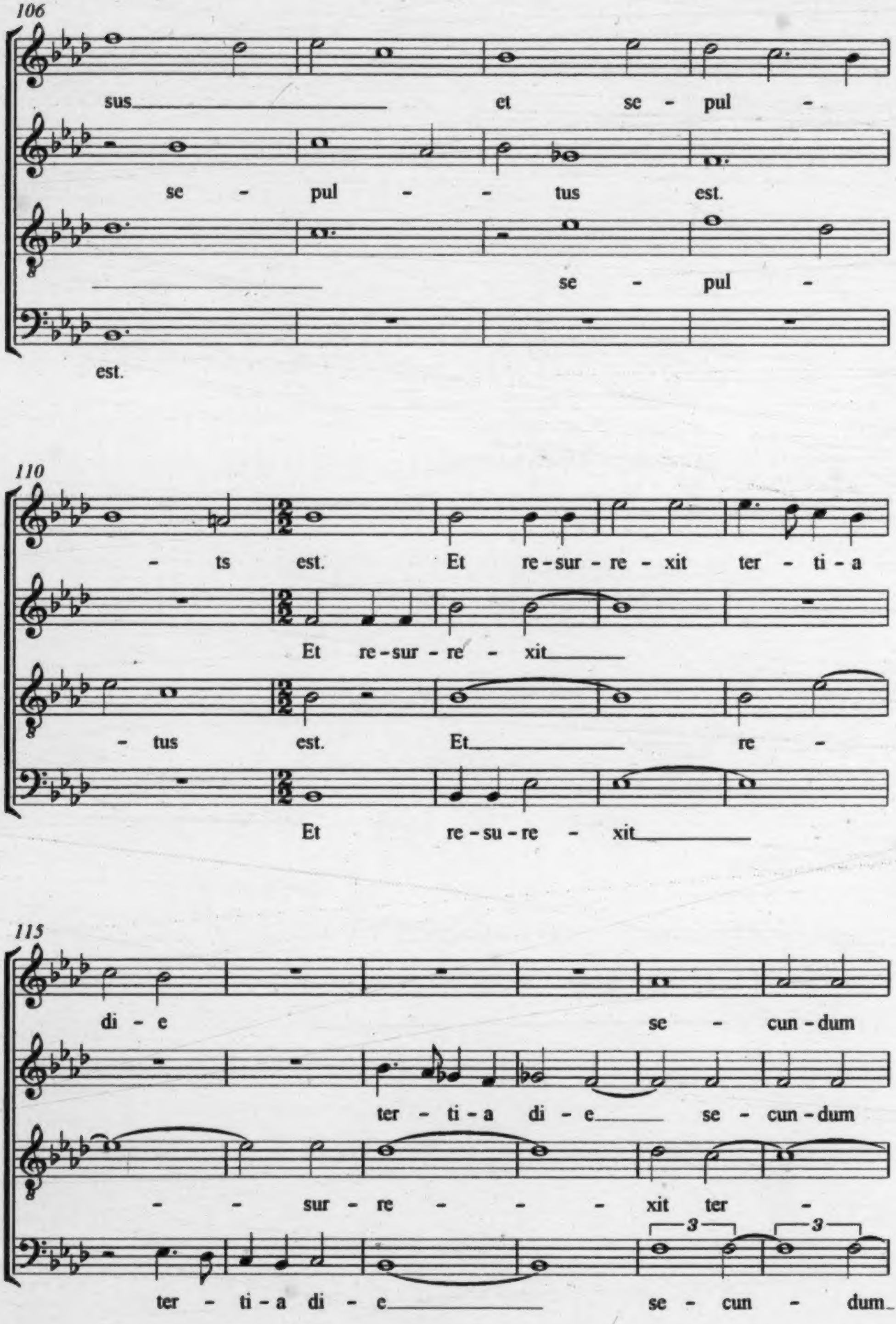

45
ter nos ho - mi - nes et prop - ter no - stram,
nes, qui prop - ter nos ho - - - - - mi - nes
qui prop - ter nos ho - mi - nes et prop - ter no
qui prop - ter nos ho - mi - nes et prop
49
et prop -
et prop - ter no - stram
- stram, et prop - ter no - stram sa -
ter no - stram, et prop - ter no -
52
ter no - stram sa - lu - - - tem
des - cen - dit
-lu - tem, et prop - ter no - stram_ sa - lu - tem, des - cen -
- stram sa - lu - - - tem

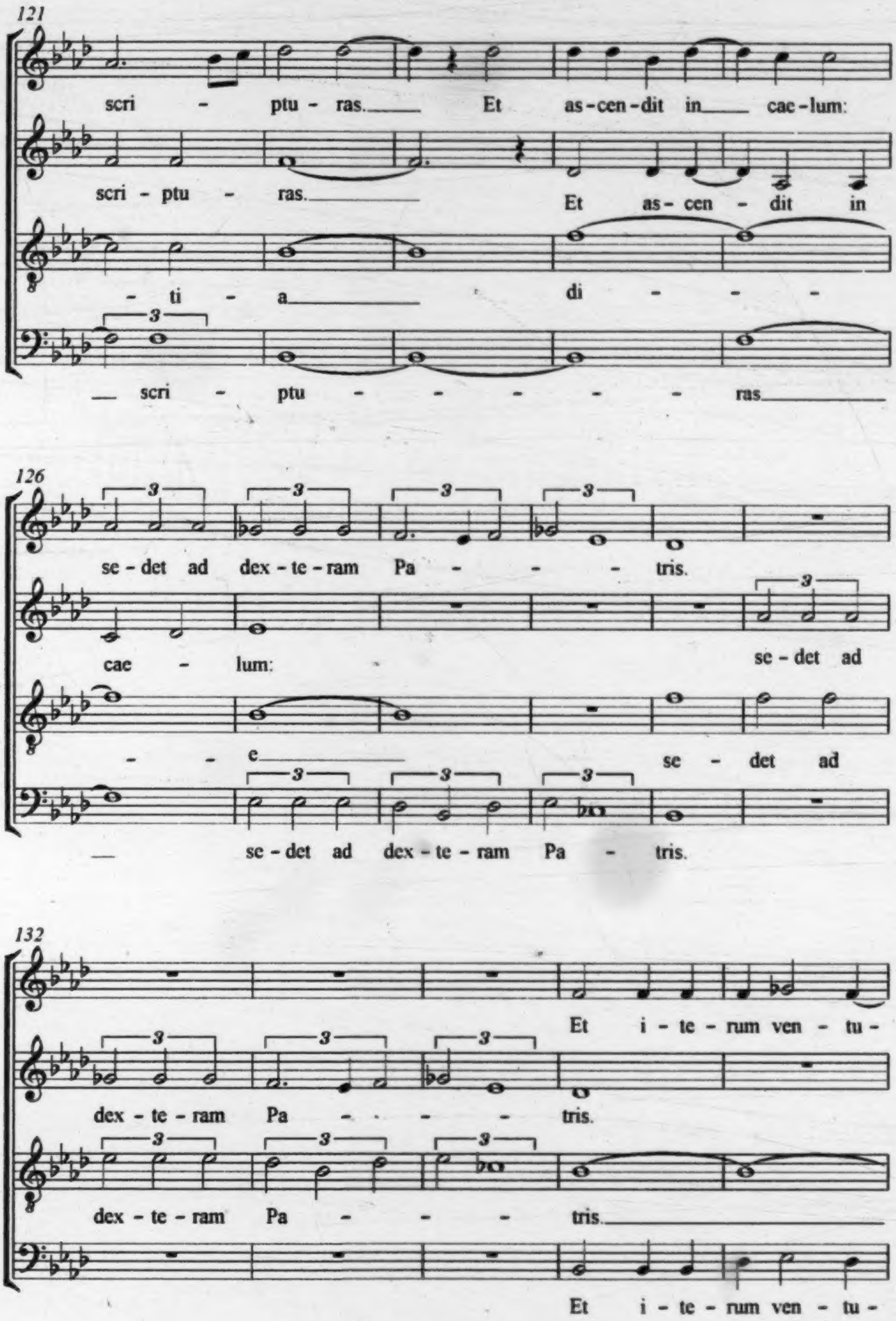

55
des - cen - dit de cae - -
de cae - lis, des - cen - - - -
dit de cae - lis,
des - cen - dit de
58
lis, de cae - lis.
- dit de cae - - lis.
des - cen - dit de cae - lis.
cae - - - lis, cae - lis.
62
Et in car -
Et in car - na - tus est, et
Et in car - na - tus est

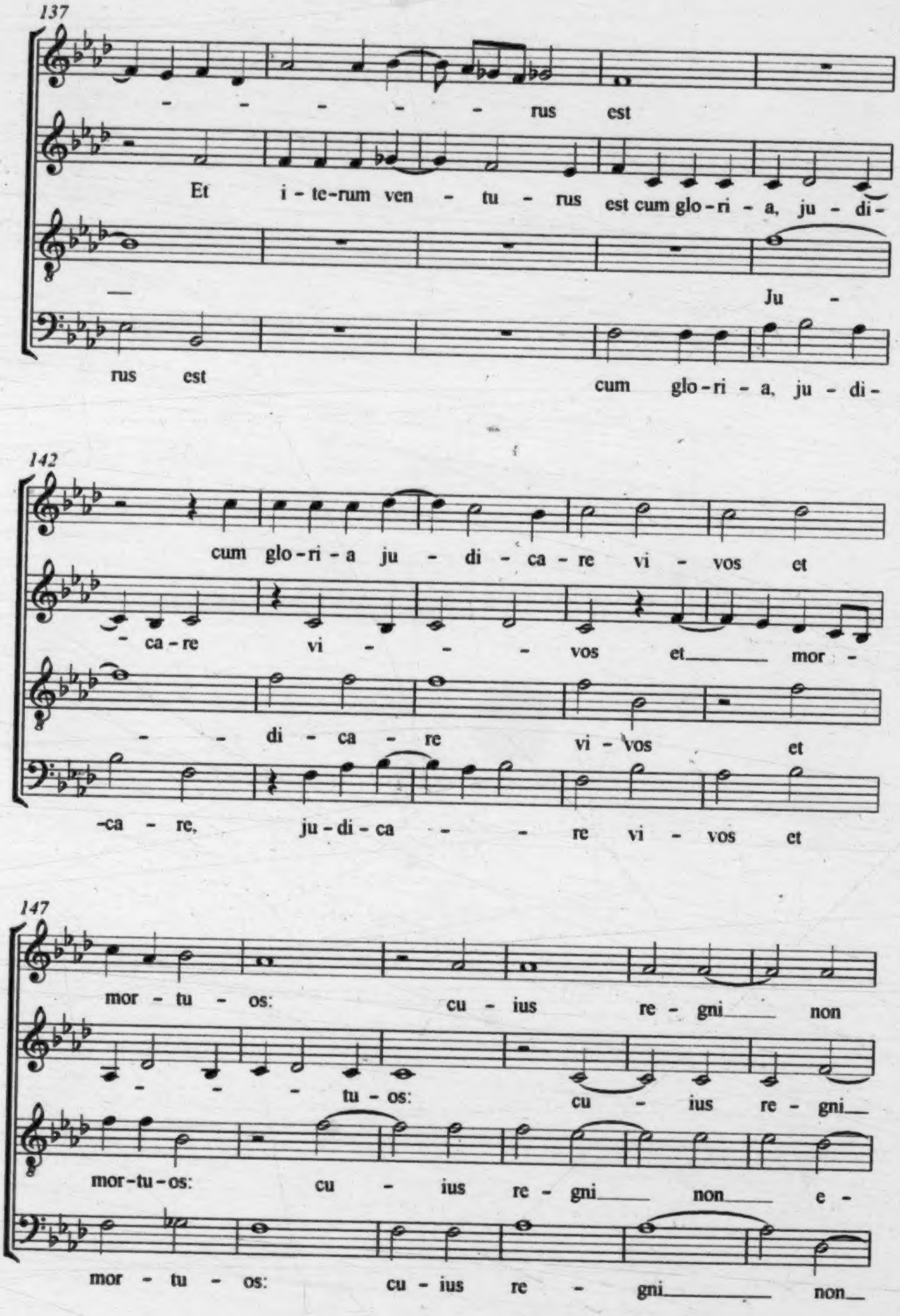

66
-na - tus est,
in car - na - tus est
de Spi - ri - tu, de Spi - ri - tu, de
Et in car - na - tus
70
et in car - na - tus est
de Spi - ri - tu San - - - - cto,
Spi - ri - tu San - cto,
est de
74
de Spi - ri -
de Spi - ri - tu
de Spi - ri - tu San - - cto
Spi - ri - tu San - cto

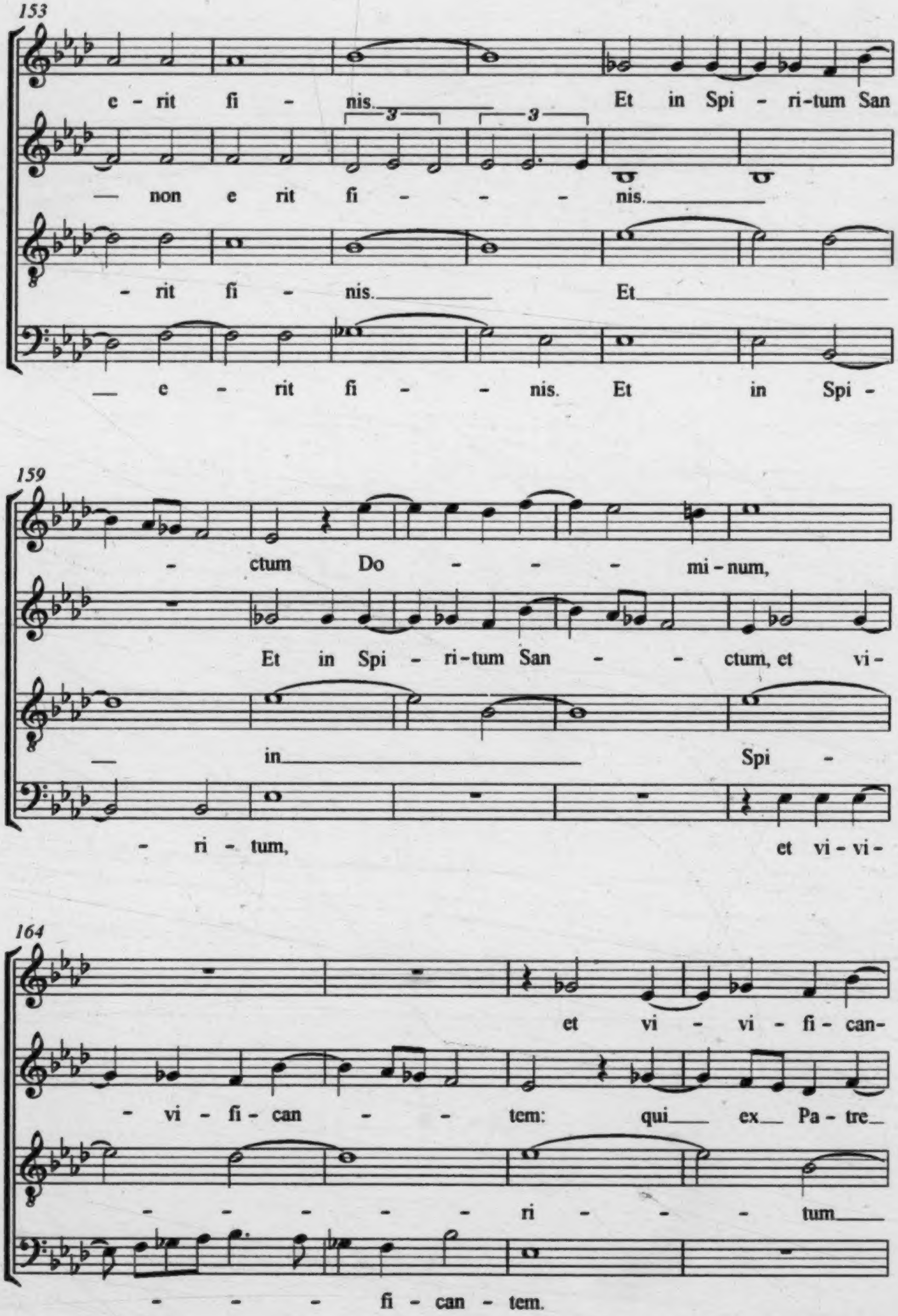

78
-tu Sancto ex
San - cto ex Ma - ri - a Vir - gi -
ex Ma - ri - - -
ex Ma - ri - a Vir - gi -
82
Ma - ri - a Vir - gi - ne, ex Ma - ri -
ne, ex Ma - ri - a Vir - gi - ne:
-a Vir - gi - ne
ne, Vir - - gi - ne:
86
-a Vir - gi - ne: Et ho - mo fac -
Et ho - mo fac -
ex Ma - ri - a Vir - gi - ne: Et ho - mo fac -
Et ho - mo fac -

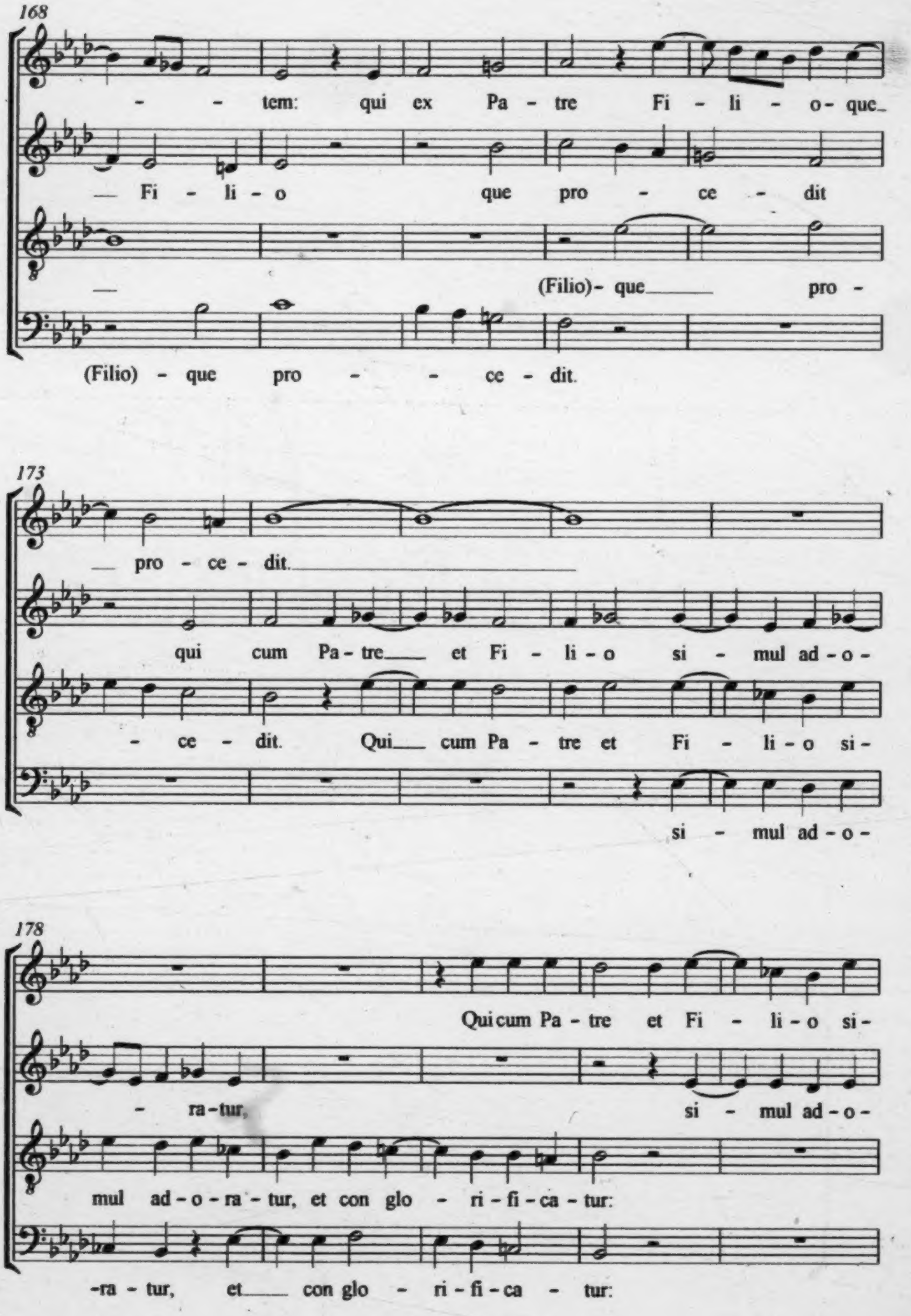

91
tus___ est. Cru - ci - fi -
tus___ est. Cru - ci - fi -
tus est. Cru - - - - - - -
tus___ est. Cru - ci - fix - us e - ti - am pro no -
96
xus e - ti - am pro no - bis:
xus e - ti - am pro no - bis:
- - ci - - - fi - - -
bis: sub Pon - ti - o
101
sub Pon - ti - o Pi - la - to pas -
sub Pon - ti - o Pi - la - to
- - - - - - xus:___
Pi - la - to pas - sus et se - pul - tus

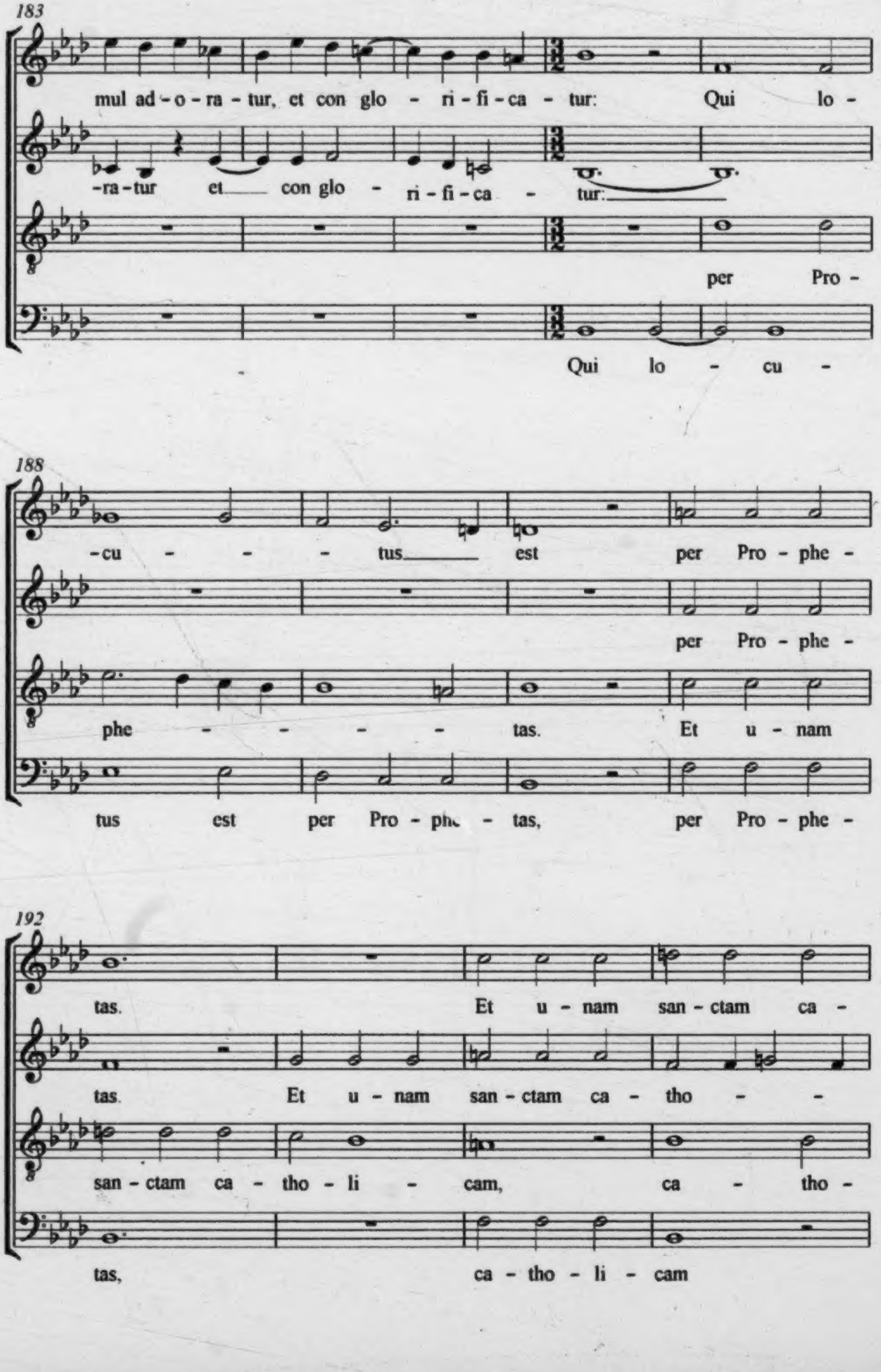

106
sus et se - pul -
se - pul - - tus est.
se - pul -
est.
110
- ts est. Et re - sur - re - xit ter - ti - a
Et re - sur - re - xit
- tus est. Et re -
Et re - su - re - xit
115
di - e se - cun - dum
ter - ti - a di - e se - cun - dum
- - sur - re - - - xit ter -
ter - ti - a di - e se - cun - dum
3
3

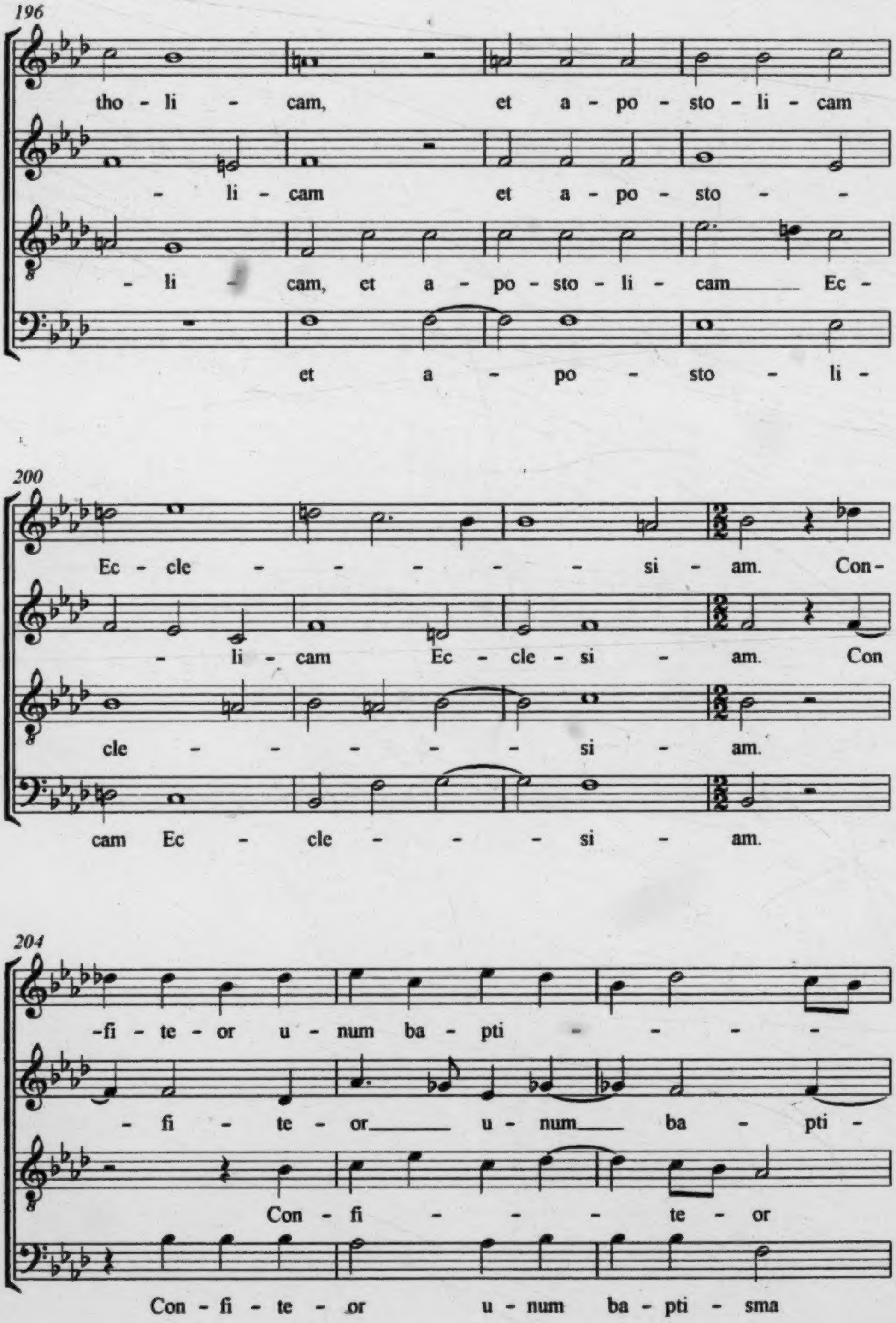

121
scri - ptu - ras. Et as - cen - dit in cae - lum:
scri - ptu - ras. Et as - cen - dit in
- ti - a di - - - -
scri - ptu - - - - - - ras
3
126
se - det ad dex - te - ram Pa - - - tris.
cae - lum: se - det ad
- - e se - det ad
se - det ad dex - te - ram Pa - tris.
3
132
Et i - te - rum ven - tu -
dex - te - ram Pa - - - - tris.
dex - te - ram Pa - - - tris.
Et i - te - rum ven - tu -
3

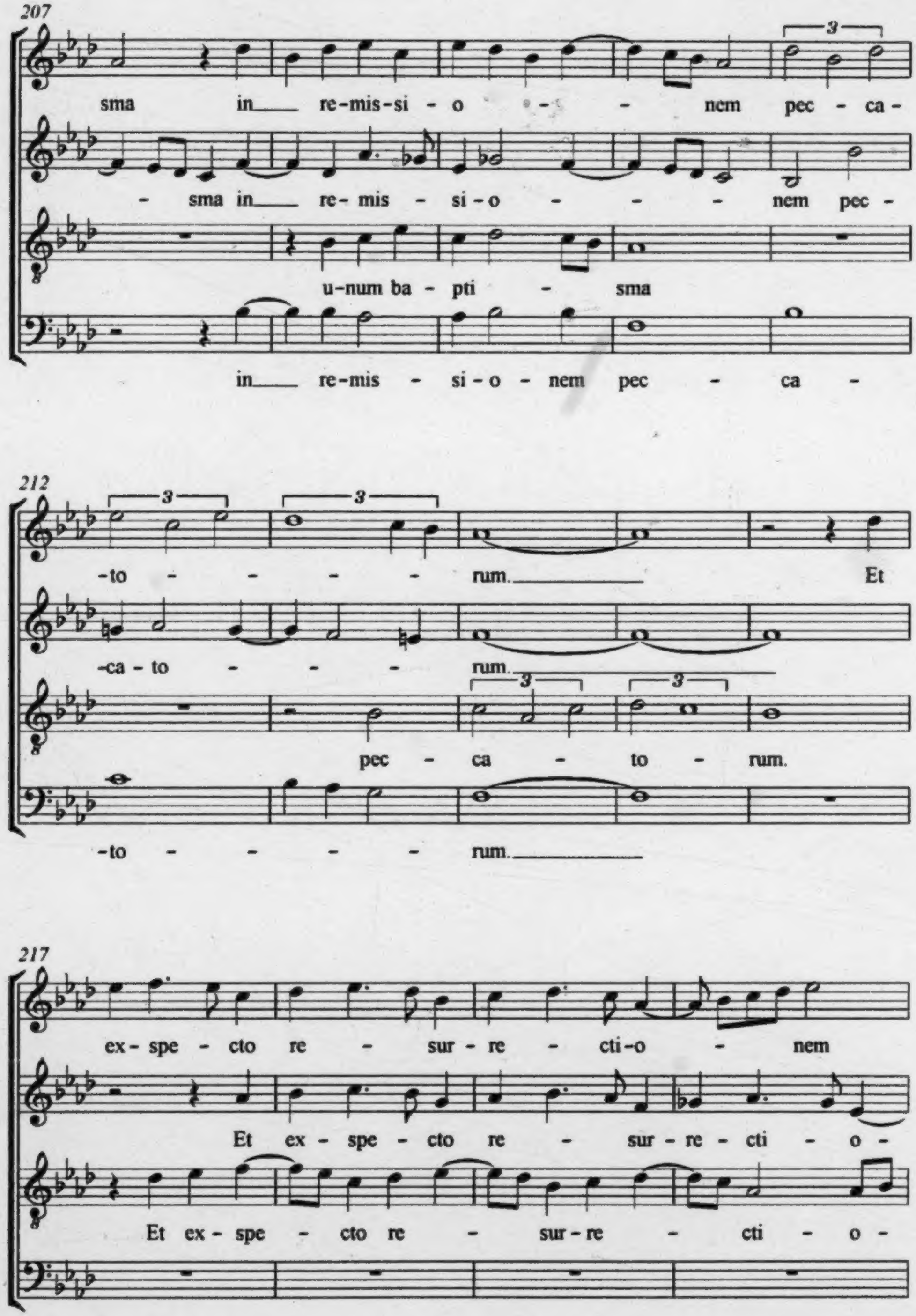

137
- - - - - rus est
Et i-te-rum ven - tu - rus est cum glo-ri - a, ju - di-
Ju -
rus est cum glo-ri - a, ju - di-
142
cum glo-ri - a ju - di - ca - re vi - vos et
- ca-re vi - - - vos et mor -
- - di - ca - re vi - vos et
-ca - re, ju-di-ca - - - re vi - vos et
147
mor - tu - os: cu - ius re - gni non
- - - tu - os: cu - ius re - gni
mor-tu-os: cu - ius re - gni non e -
mor - tu - os: cu - ius re - gni non

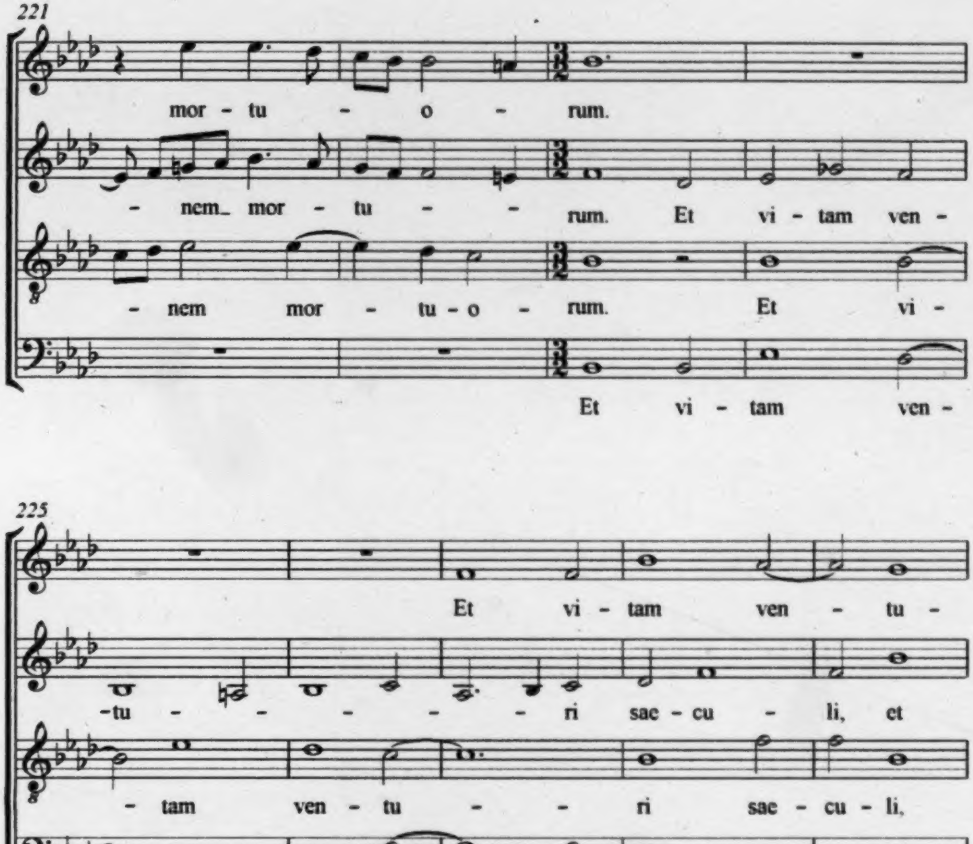

153
e - rit fi - nis. Et in Spi - ri-tum San
— non e rit fi - - - nis.
- rit fi - nis. Et
— e - rit fi - - nis. Et in Spi -
159
- ctum Do - - - mi-num,
Et in Spi - ri-tum San - - ctum, et vi-
— in Spi -
- ri - tum, et vi-vi-
164
et vi - vi - fi - can-
- vi - fi - can - - tem: qui ex Pa - tre
- - - - - ri - - - tum
- - - fi - can - tem.


168
- - tem: qui ex Pa - tre Fi - li - o - que
— Fi - li - o que pro - ce - dit
— (Filio) - que pro -
(Filio) - que pro - - ce - dit.
173
— pro - ce - dit.
qui cum Pa - tre — et Fi - li - o si - mul ad - o -
- ce - dit. Qui — cum Pa - tre et Fi - li - o si -
si - mul ad - o -
178
Qui cum Pa - tre et Fi - li - o si -
- ra - tur, si - mul ad - o -
mul ad - o - ra - tur, et con glo - ri - fi - ca - tur:
-ra - tur, et — con glo - ri - fi - ca - tur:


183
mul ad - o - ra - tur, et con glo - ri - fi - ca - tur: Qui lo -
-ra - tur et con glo - ri - fi - ca - tur:
per Pro -
Qui lo - cu -
188
-cu - - - tus est per Pro - phe -
per Pro - phe -
phe - - - - tas. Et u - nam
tus est per Pro - phe - tas, per Pro - phe -
192
tas. Et u - nam san - ctam ca -
tas. Et u - nam san - ctam ca - tho - -
san - ctam ca - tho - li - cam, ca - tho -
tas, ca - tho - li - cam


196
tho - li - cam, et a - po - sto - li - cam
- li - cam et a - po - sto - -
- li - cam, et a - po - sto - li - cam Ec -
et a - po - sto - li -
200
Ec - cle - - - - - si - am. Con -
- li - cam Ec - cle - si - am. Con
cle - - - - - si - am.
cam Ec - cle - - - si - am.
204
-fi - te - or u - num ba - pti - - - -
- fi - te - or u - num ba - pti -
Con - fi - - - te - or
Con - fi - te - or u - num ba - pti - sma


207
sma in___ re-mis-si - o - - - nem pec - ca -
- sma in___ re- mis - si - o - - - nem pec -
u-num ba - pti - sma
in___ re-mis - si - o - nem pec - ca -
212
-to - - - - rum.___ Et
-ca - to - - - rum.___
pec - ca - to - rum.
-to - - - - rum.___
217
ex-spe - cto re - sur - re - cti-o - nem
Et ex - spe - cto re - sur - re - cti - o -
Et ex - spe - cto re - sur-re - cti - o -
3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mor - tu - o - rum.
- nem mor - tu - - rum. Et vi - tam ven -
- nem mor - tu - o - rum. Et vi -
Et vi - tam ven -
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Et vi - tam ven - tu -
-tu - - - - - ri sae - cu - li, et
- tam ven - tu - - - ri sae - cu - li,
- tu - ri sae - cu - li,
230
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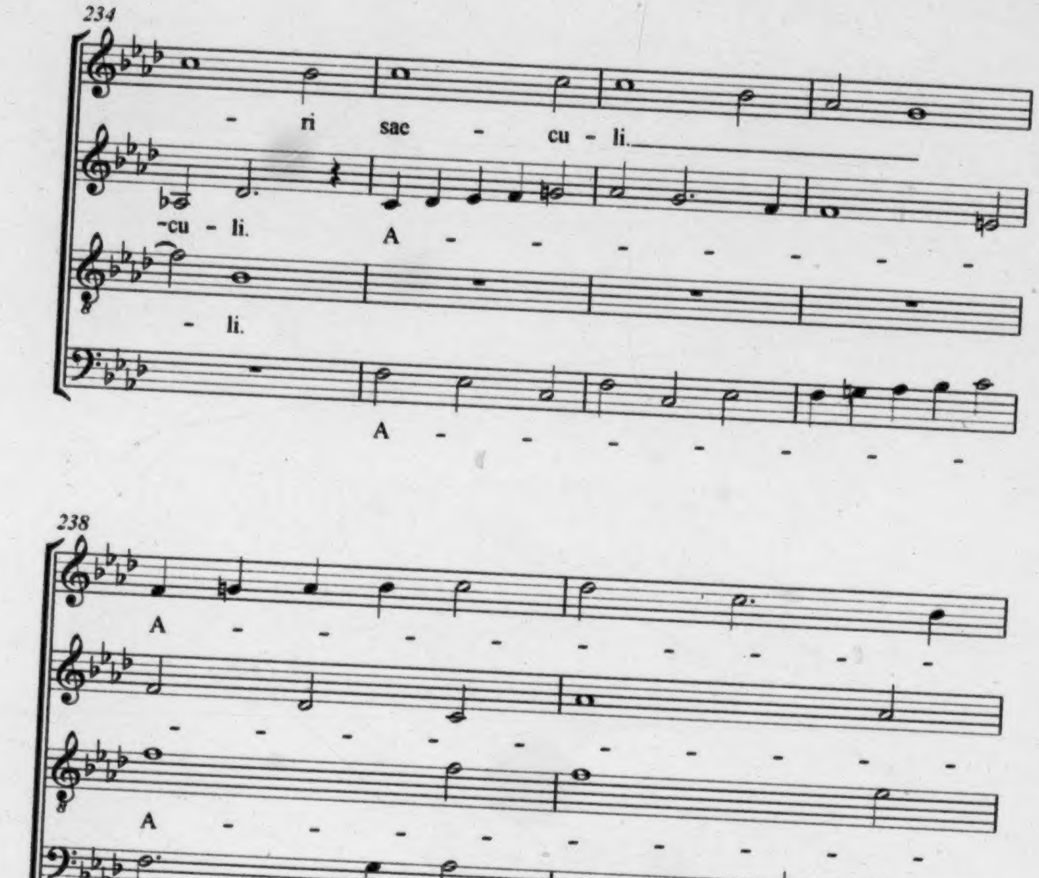
sae - cu -
sae - - - - - cu - li.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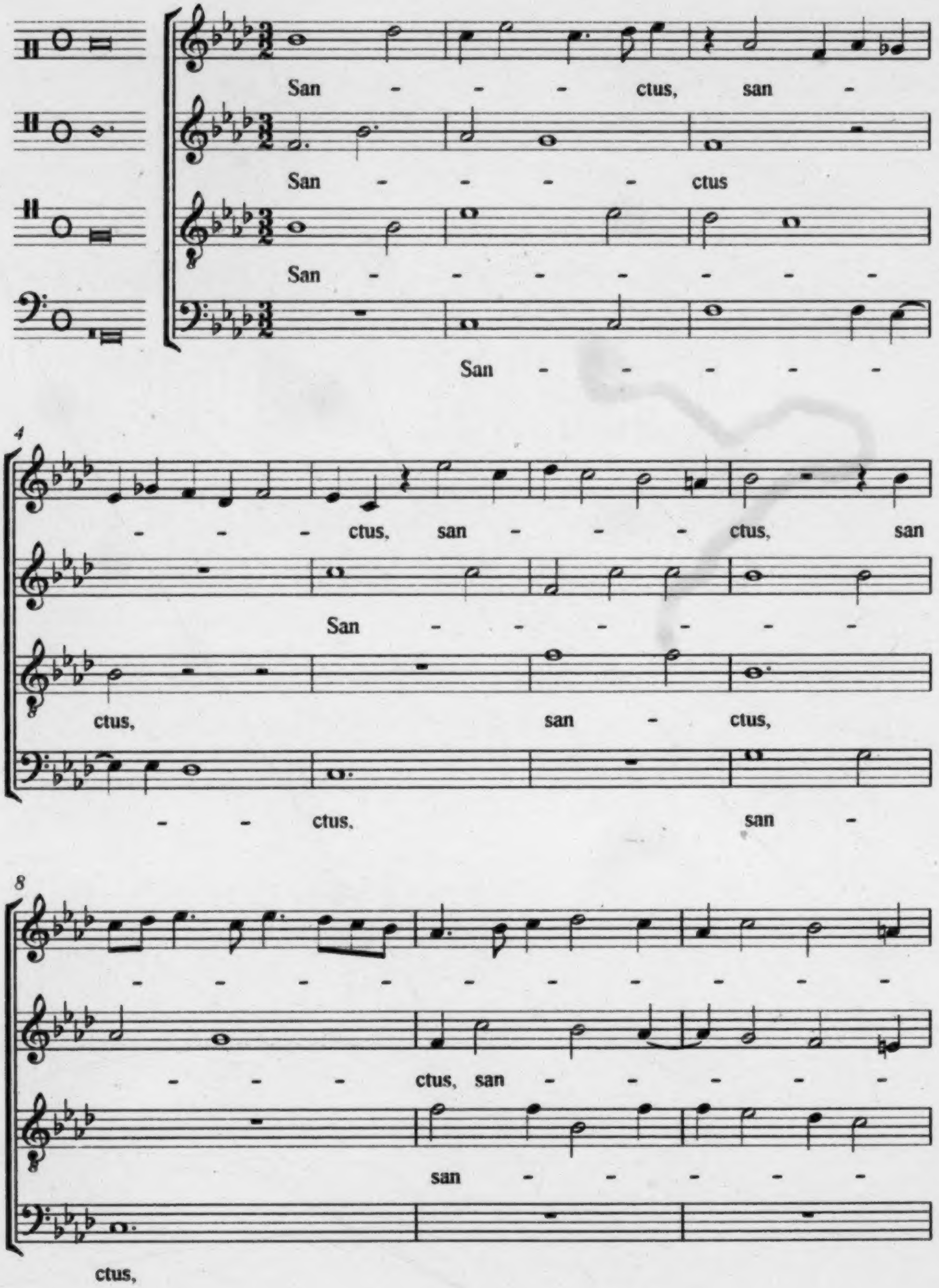
- ri sae - cu - li.
-cu - li. A - - - - - - -
- li.
A - - - - - - -
238
A - - - - - - - - -
- - - - - - - - - -
A - - - - - - - - -
- - - - - - - - - -
240
- - - - men.
- - - - - - - men.
- - - - men.
- - - - men.

Sanctus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San - - - - ctus
San - - - - - - - -
San - - - - -
4
- - - ctus, san - - - ctus, san
San - - - - - -
ctus, san - ctus,
- - ctus, san -
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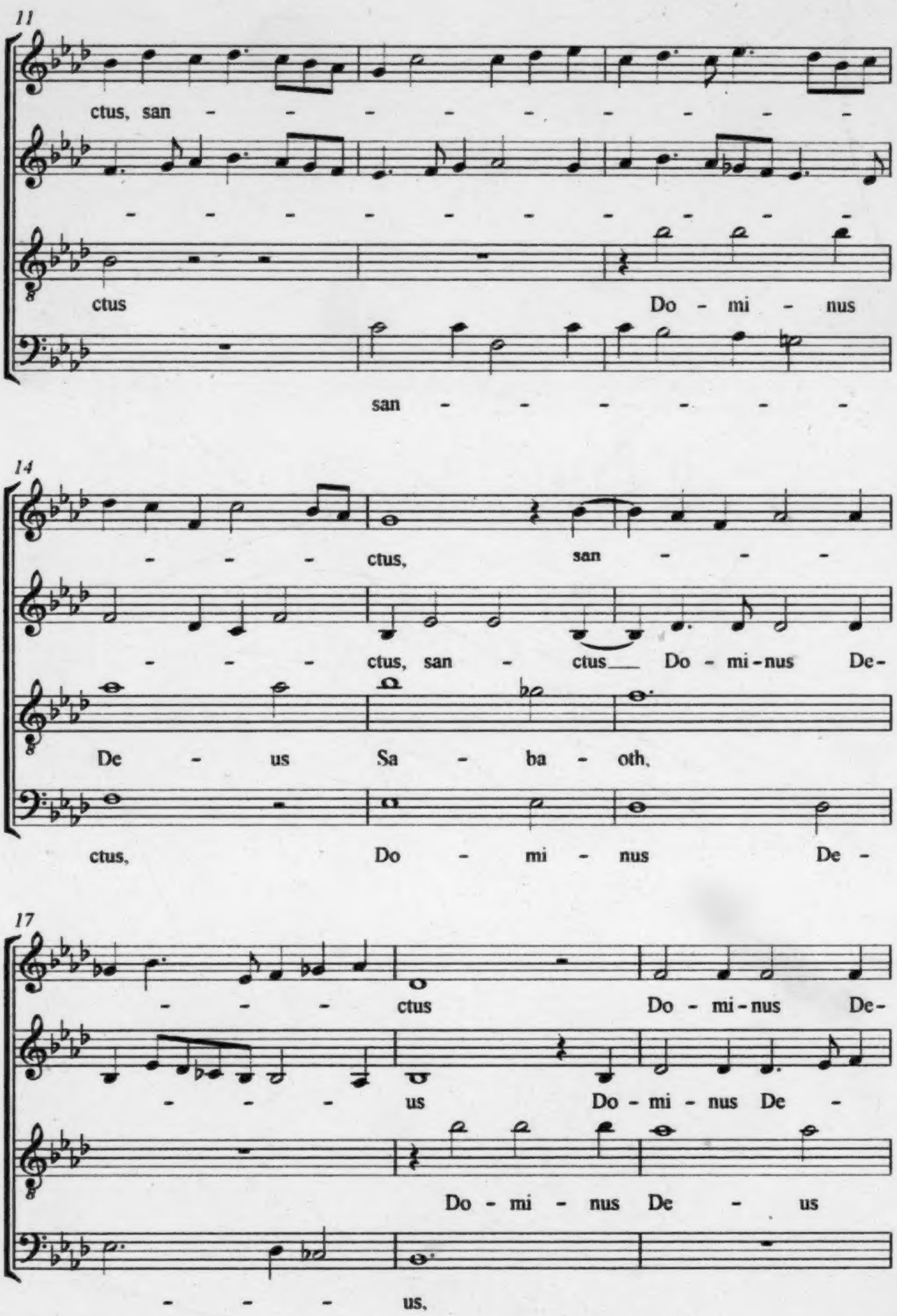
- - - ctus, san - - - - -
san - - - - - -
ctus,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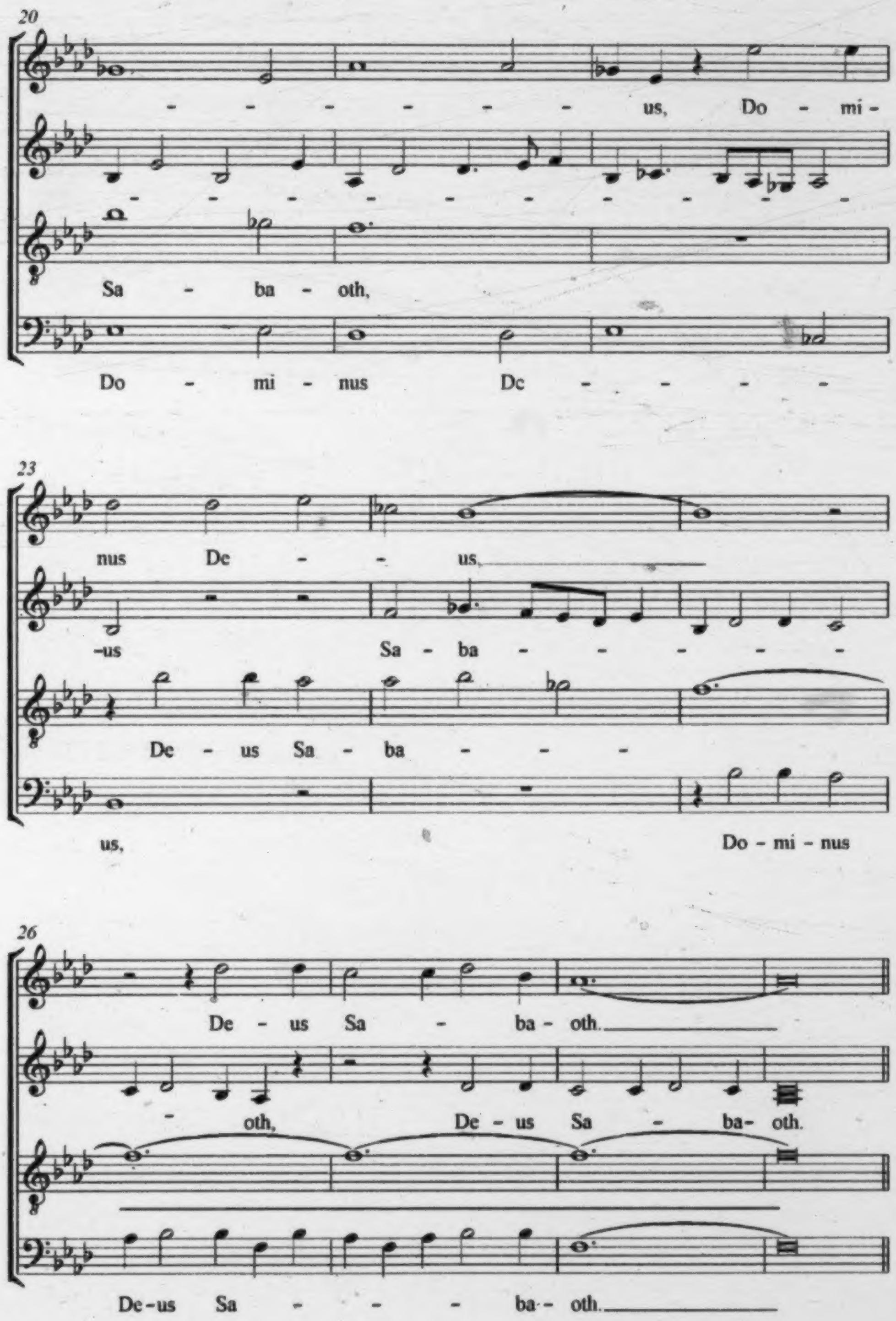
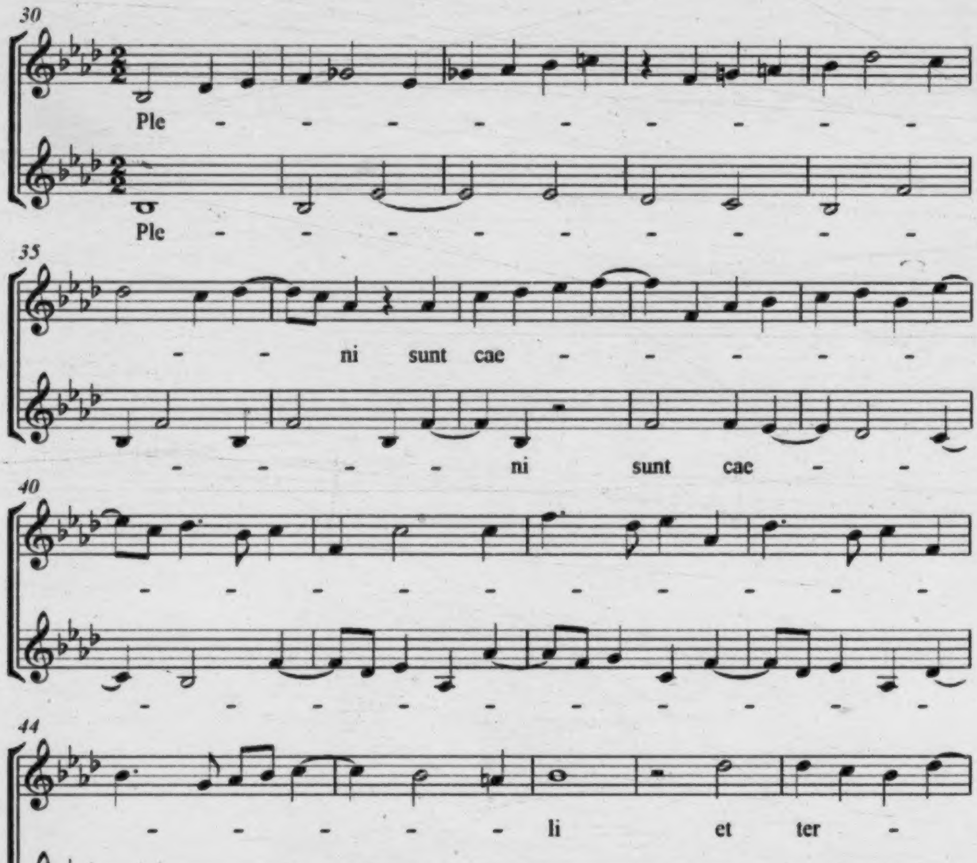
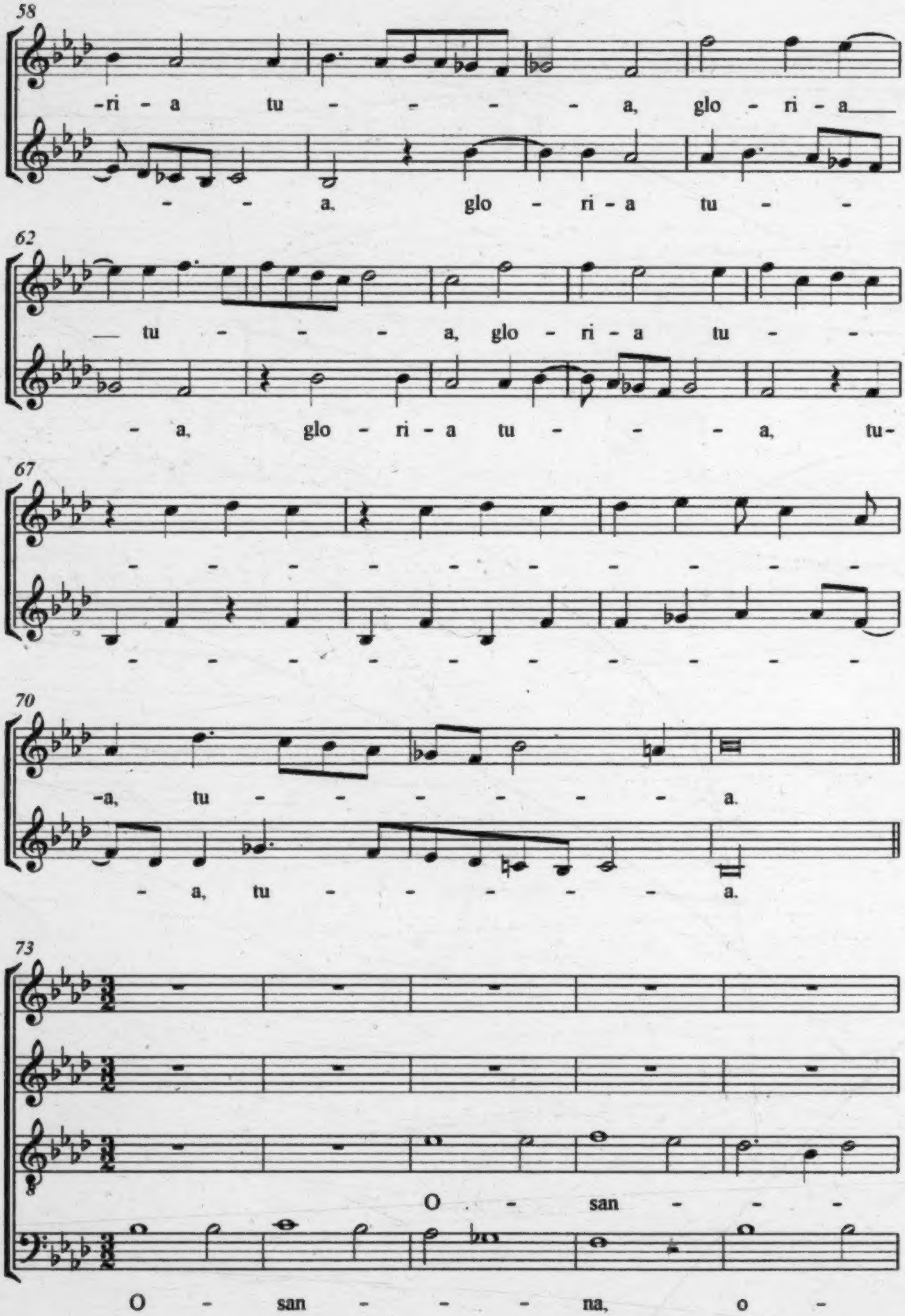
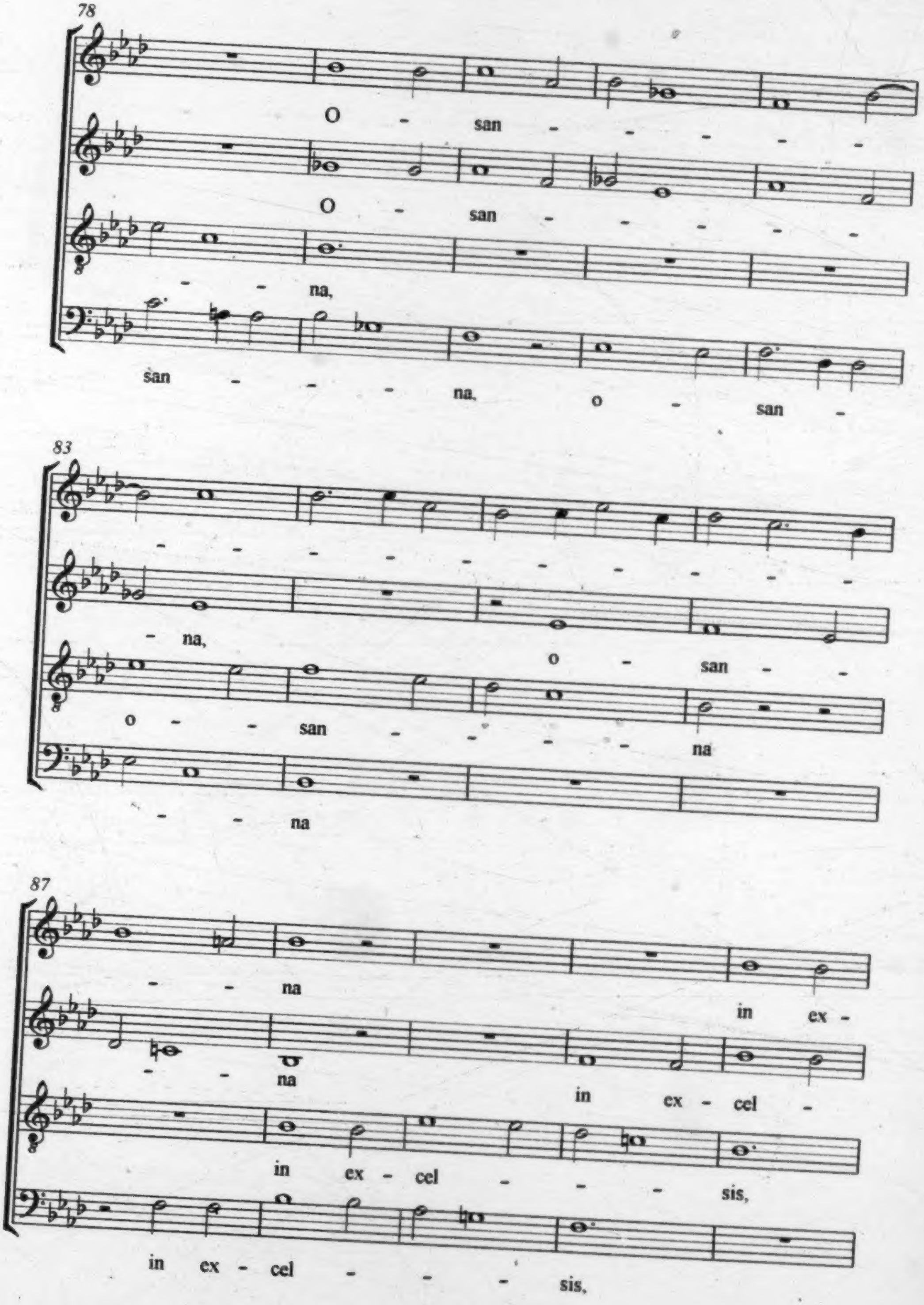
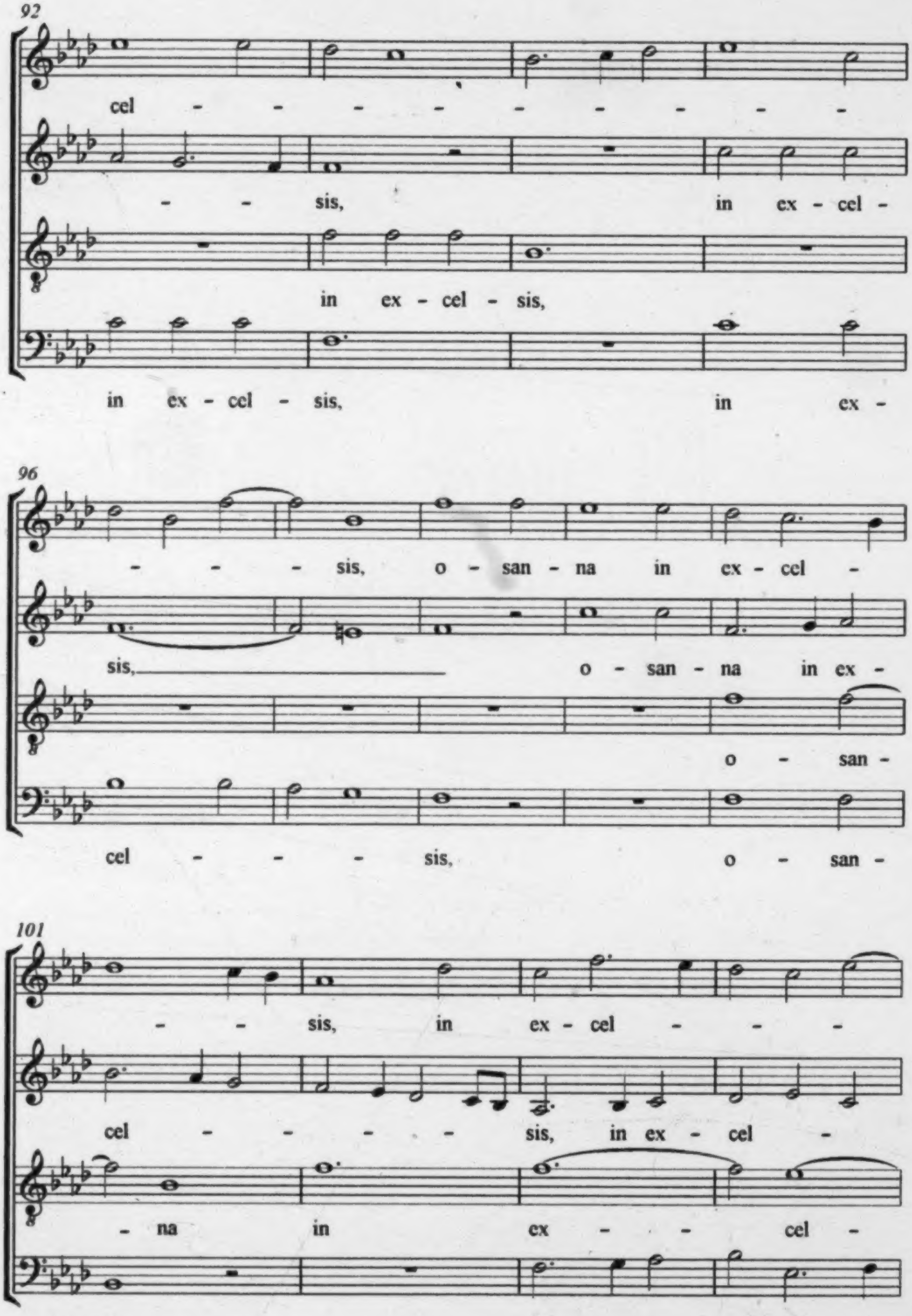
ctus, san - - - - - - - - -
- - - - - - - - - -
ctus Do - mi - nus
san - - - - - - -
14
- - - ctus, san - - - -
- - - ctus, san - ctus Do - mi - nus De -
De - us Sa - ba - oth,
ctus, Do - mi - nus De -
17
- - - ctus Do - mi - nus De -
- - - us Do - mi - nus De -
Do - mi - nus De - us
- - - us,

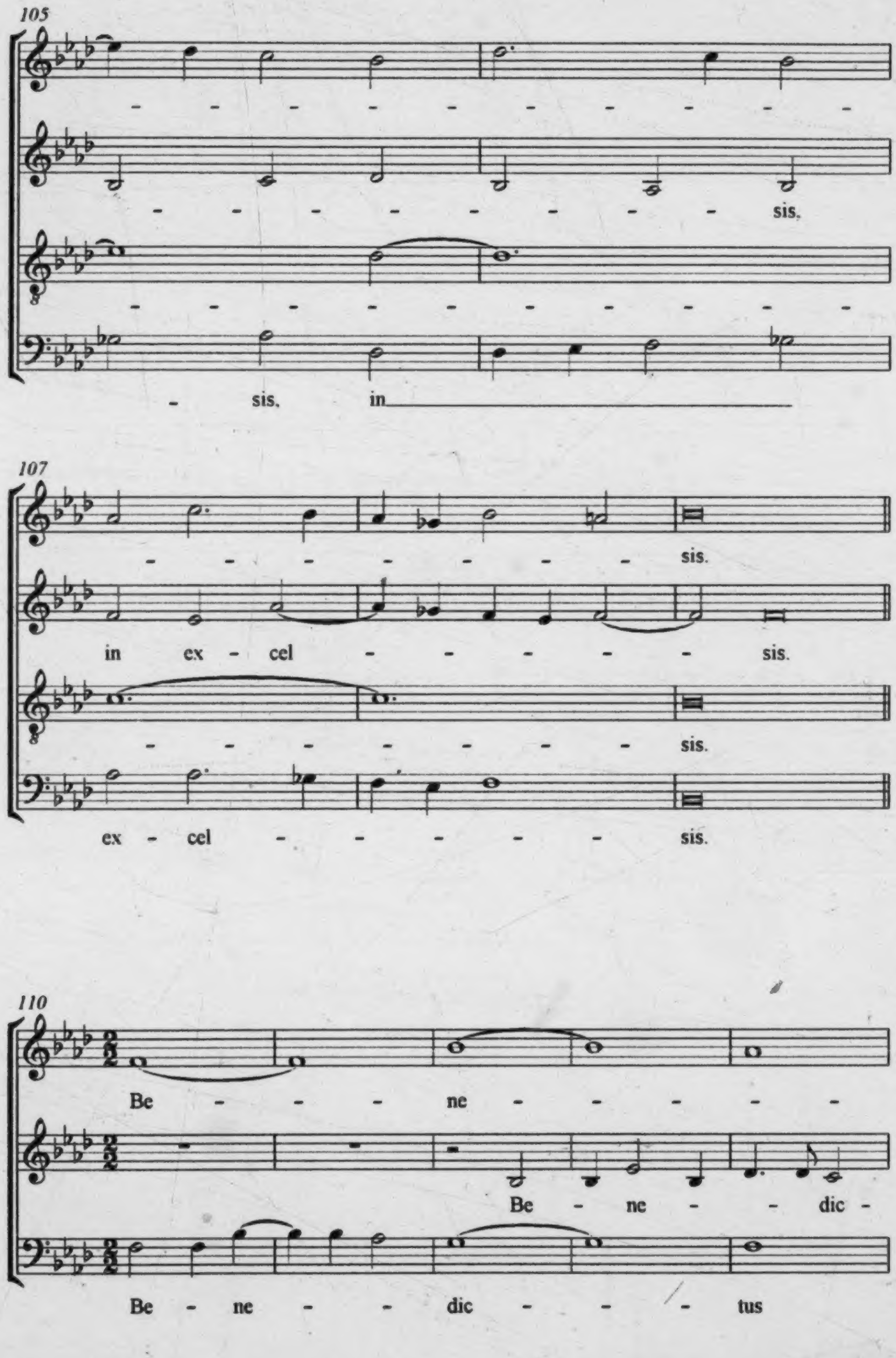

20
- - - - - - us, Do - mi -
- - - - - - - - - - - - - -
Sa - ba - oth,
Do - mi - nus Dc - - - - -
23
nus De - - us,
-us Sa - ba - - - - - -
De - us Sa - ba - - - -
us, Do - mi - nus
26
De - us Sa - ba - oth.
- oth, De - us Sa - ba- oth.
De-us Sa - - - ba- - oth.


30
Ple
Ple
35
ni sunt cae
ni sunt cae
40
44
li
et ter
li
et
49
ra
ter
ra glo - ri - a
54
glo - ri - a tu - a, glo -
tu - a, glo - ri - a tu -


58
-ri - a tu - - - - a, glo - ri - a
- - a, glo - ri - a tu - -
62
tu - - - a, glo - ri - a tu - -
- a, glo - ri - a tu - - - a, tu-
67
- - - - - - - - - - - - - -
- - - - - - - - - - - - - -
70
-a, tu - - - - - - a.
- a, tu - - - - - - a.
73
O - san - - -
O - san - - - na, o -


78
O - san - - - -
O - san - - - - -
- - na,
san - - - na, o - san -
83
- - - - - - - - -
- na, o - san - -
o - - san - - - - na
- - na
87
- - na
in ex -
- - na
in ex - cel -
in ex - cel - - - sis,
in ex - cel - - - sis,


92
cel - - - - - - - - -
- - sis, in ex - cel -
in ex - cel - sis,
in ex - cel - sis, in ex -
96
- - - sis, o - san - na in ex - cel -
sis, o - san - na in ex -
o - san -
cel - - - sis, o - san -
101
- - sis, in ex - cel - - -
cel - - - - - sis, in ex - cel -
- na in ex - - - cel -
-na in ex - cel -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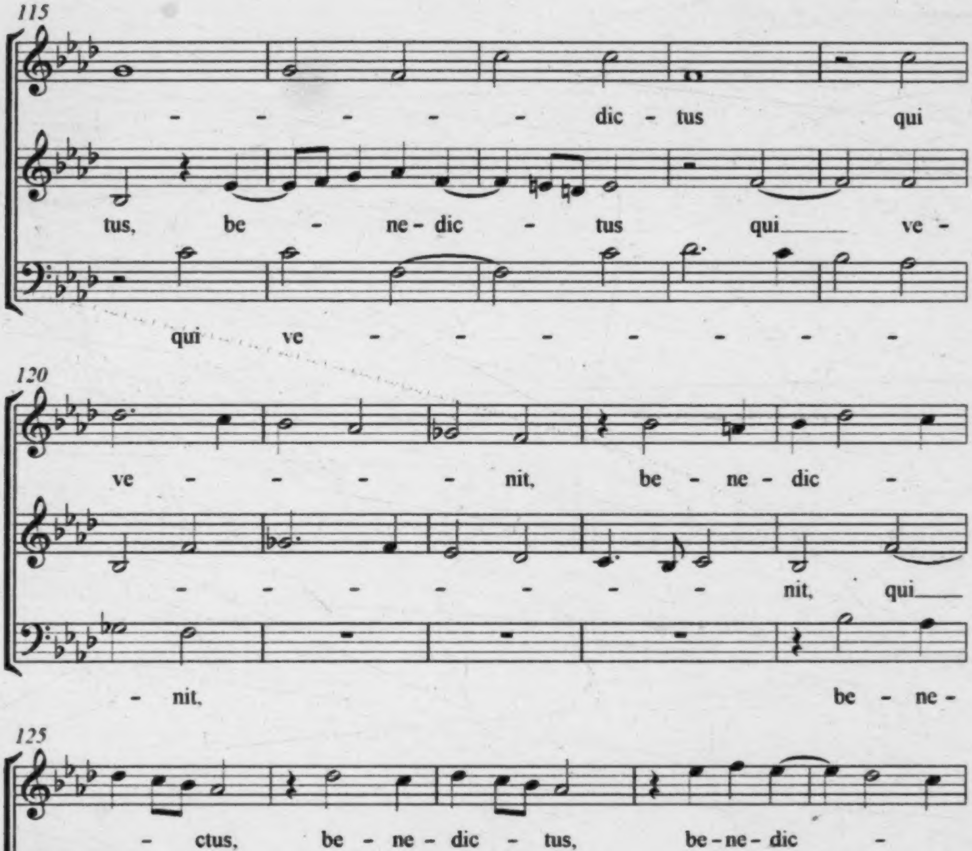
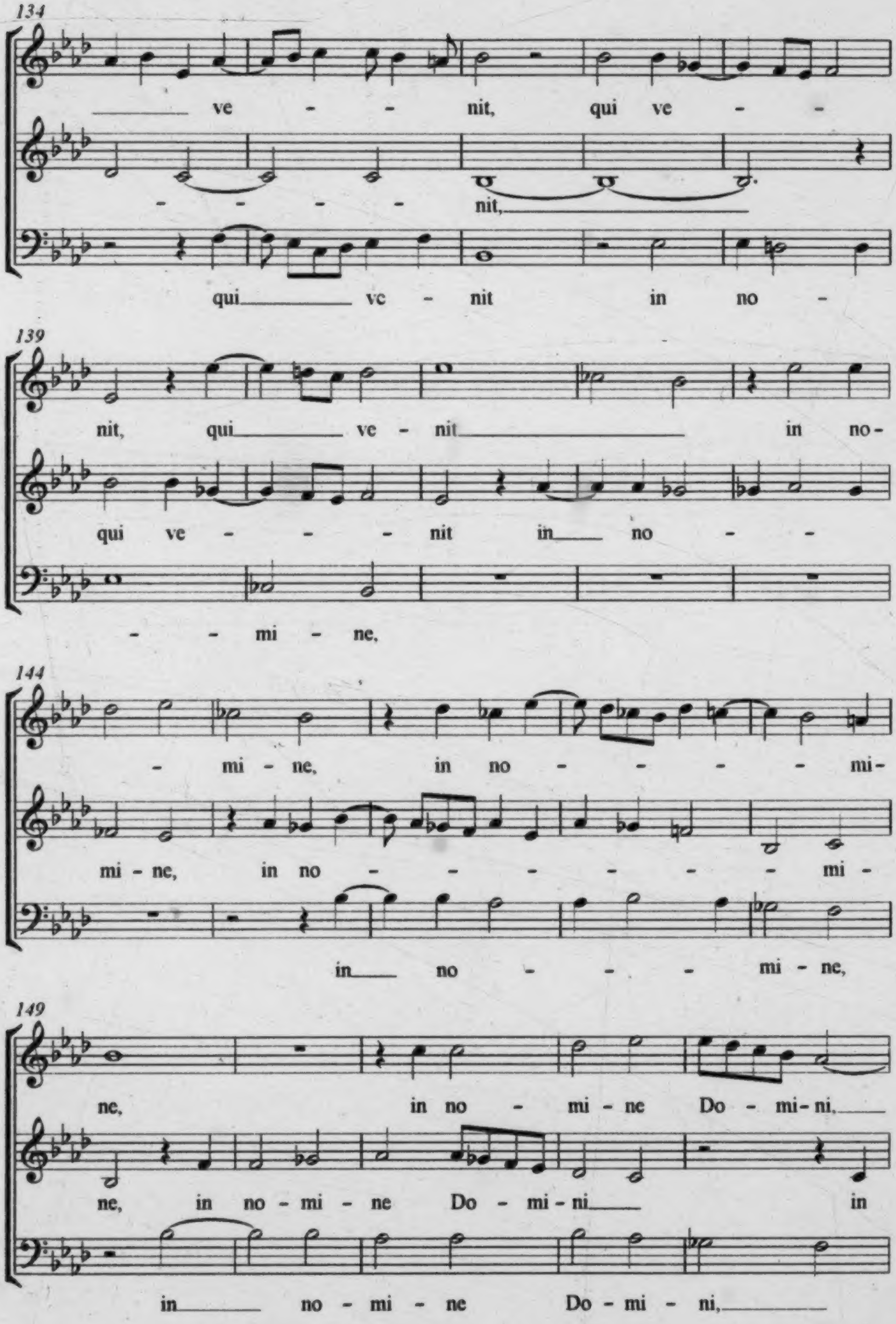
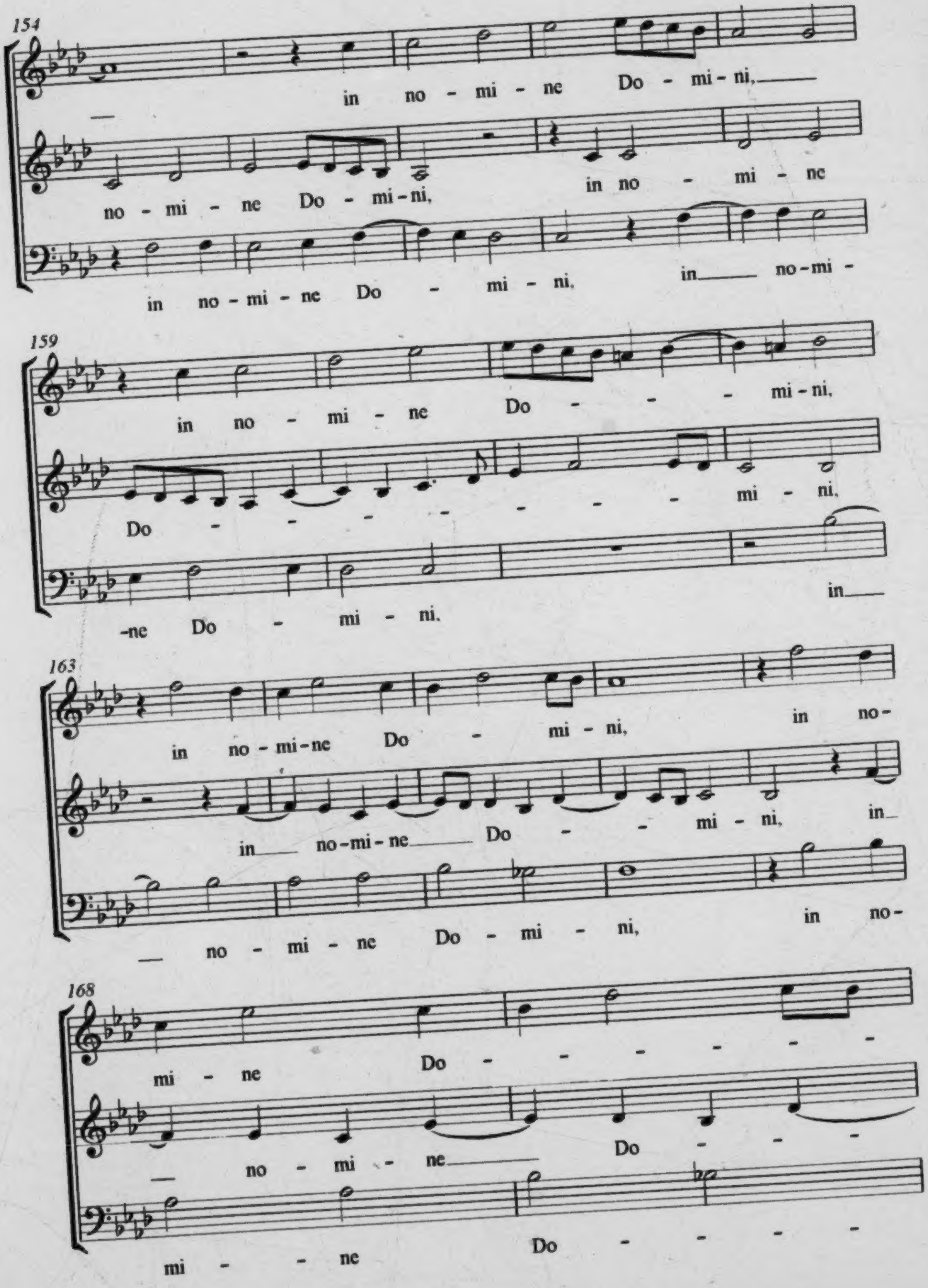
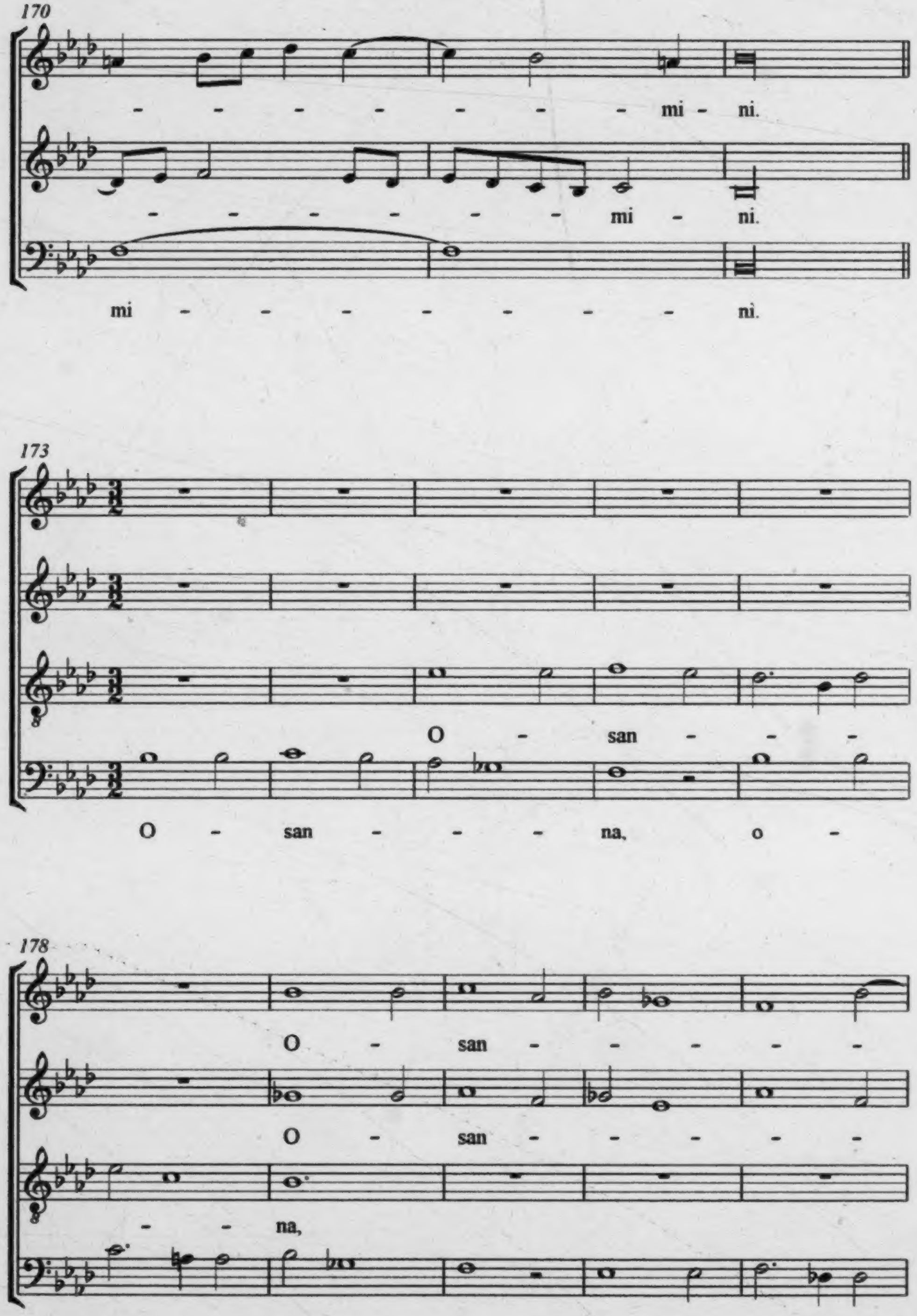
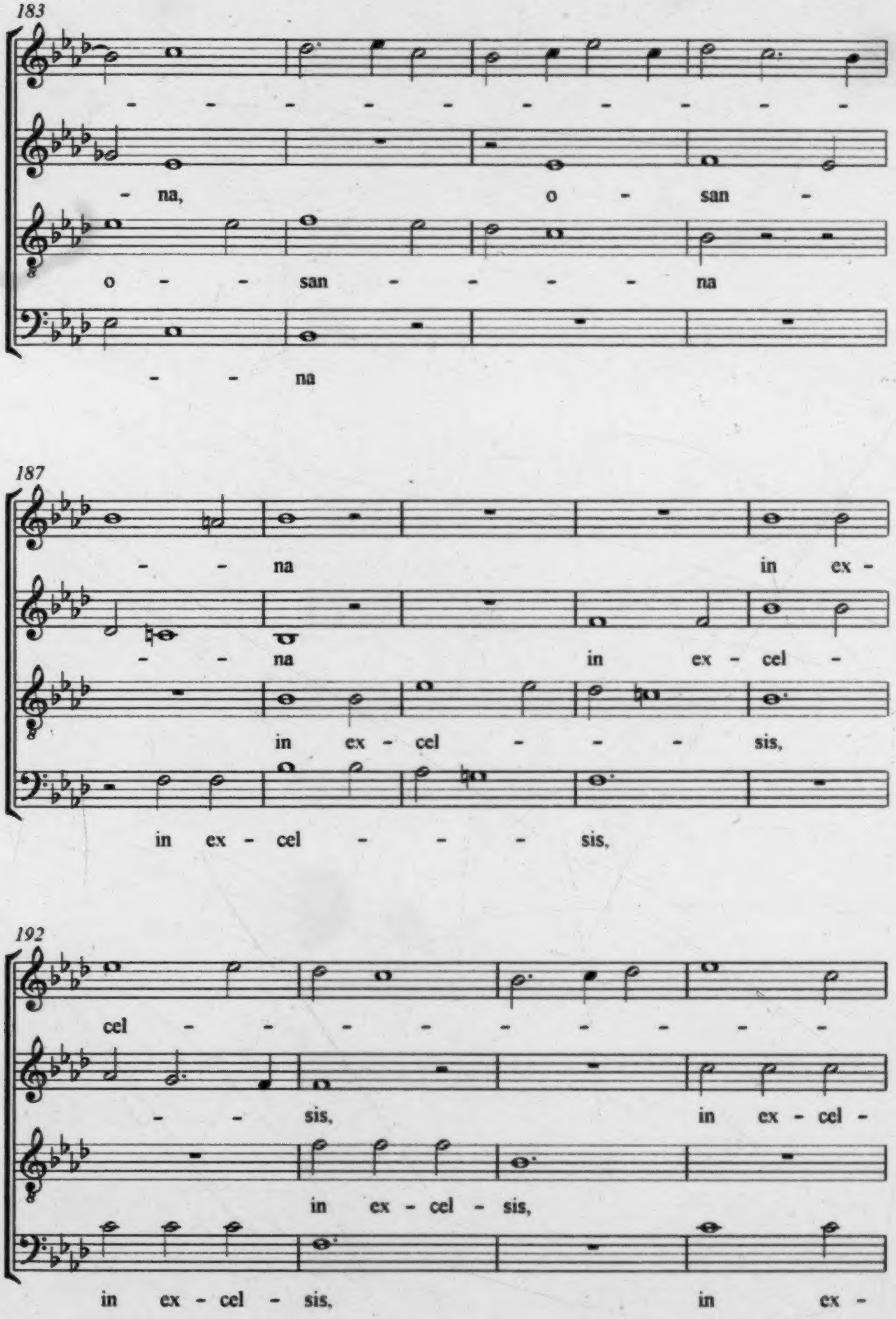
- - - - - - - - - -
- - - - - - - - sis.
- - - - - - - - - -
- sis, in
107
- - - - - - - sis.
in ex - cel - - - - - sis.
- - - - - - - sis.
ex - cel - - - - - sis.
110
Be - - - ne - - - - -
Be - ne - - dic -
Be - ne - - dic - - - tus

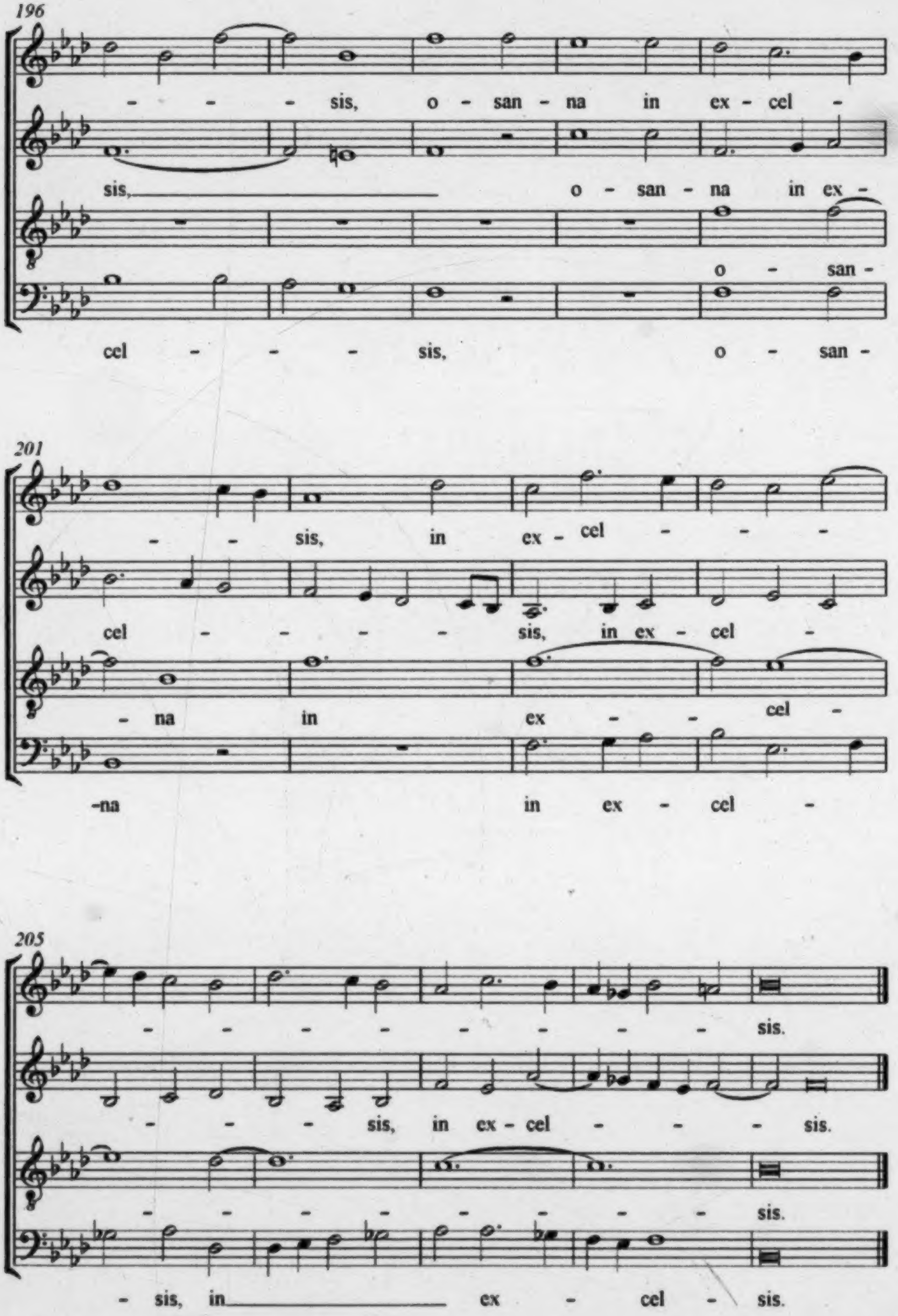

115
- - - - - dic - tus qui
tus, be - ne - dic - tus qui ve -
qui ve - - - - - - - -
120
ve - - - - nit, be - ne - dic -
- - - - - - - - nit, qui
- nit, be - ne -
125
- ctus, be - ne - dic - tus, be - ne - dic -
ve - nit,
dic - tus, be - ne - dic - tus, be - ne - dic - ctus qui
130
tus qui
qui ve - - - - - - -
ve - - - - - - - - nit,


134
ve - - nit, qui ve - -
- - - - nit,
qui ve - nit in no -
139
nit, qui ve - nit in no-
qui ve - - - nit in no - -
- - mi - ne,
144
- mi - ne, in no - - - - mi-
mi - ne, in no - - - - - mi -
in no - - - mi - ne,
149
ne, in no - mi - ne Do - mi - ni,
ne, in no - mi - ne Do - mi - ni in
in no - mi - ne Do - mi - ni,

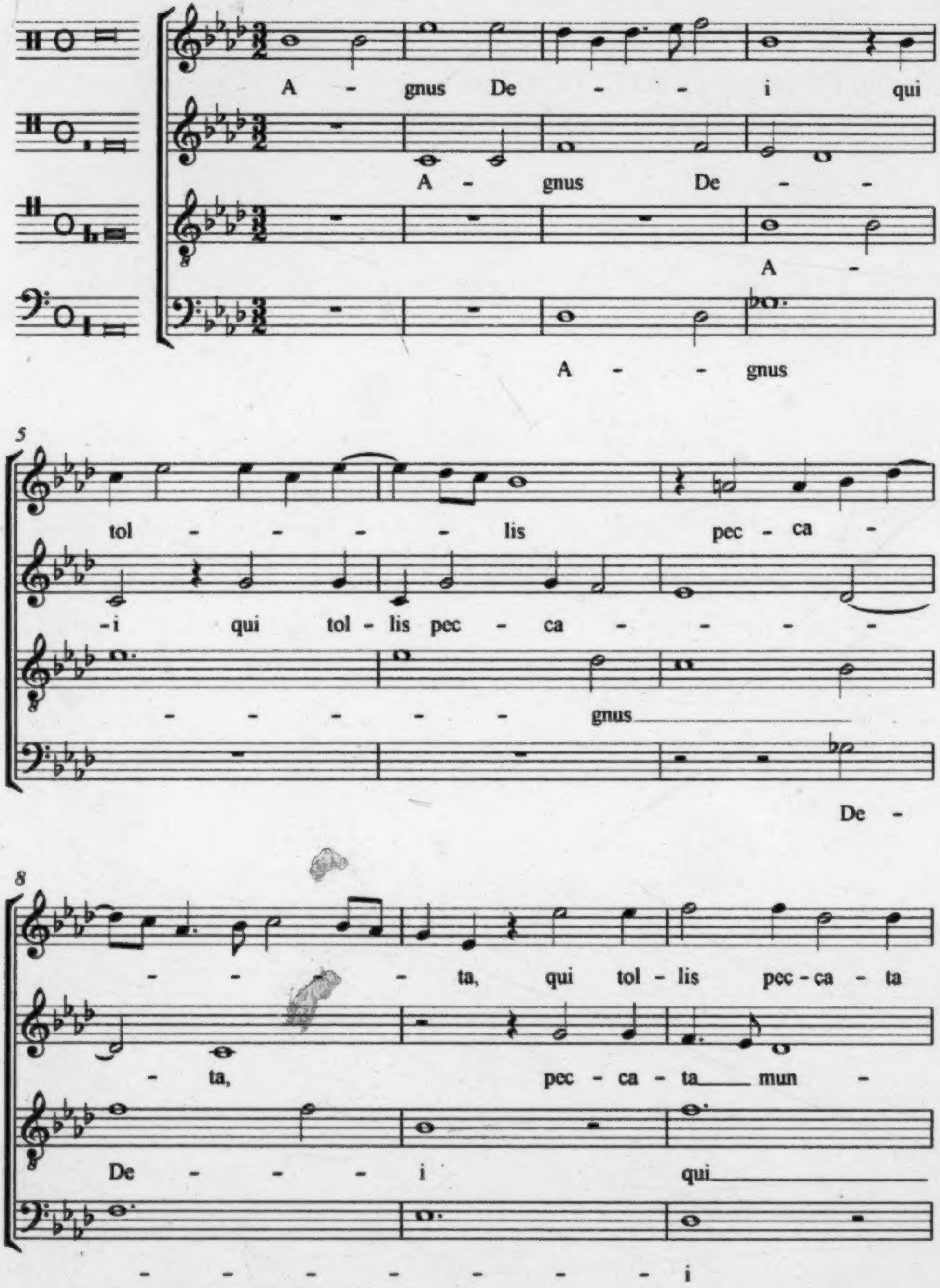

154
— in no - mi - ne Do - mi - ni, —
no - mi - ne Do - mi - ni, in no - mi - ne
in no - mi - ne Do - mi - ni, in — no - mi -
159
in no - mi - ne Do - - - mi - ni,
Do - - - - - - - - mi - ni,
-ne Do - mi - ni, in —
163
in no - mi - ne Do - mi - ni, in no-
in — no - mi - ne — Do - - mi - ni, in —
— no - mi - ne Do - mi - ni, in no-
168
mi - ne Do - - - - - -
— no - mi - ne — Do - - -
mi - - ne Do - - - -

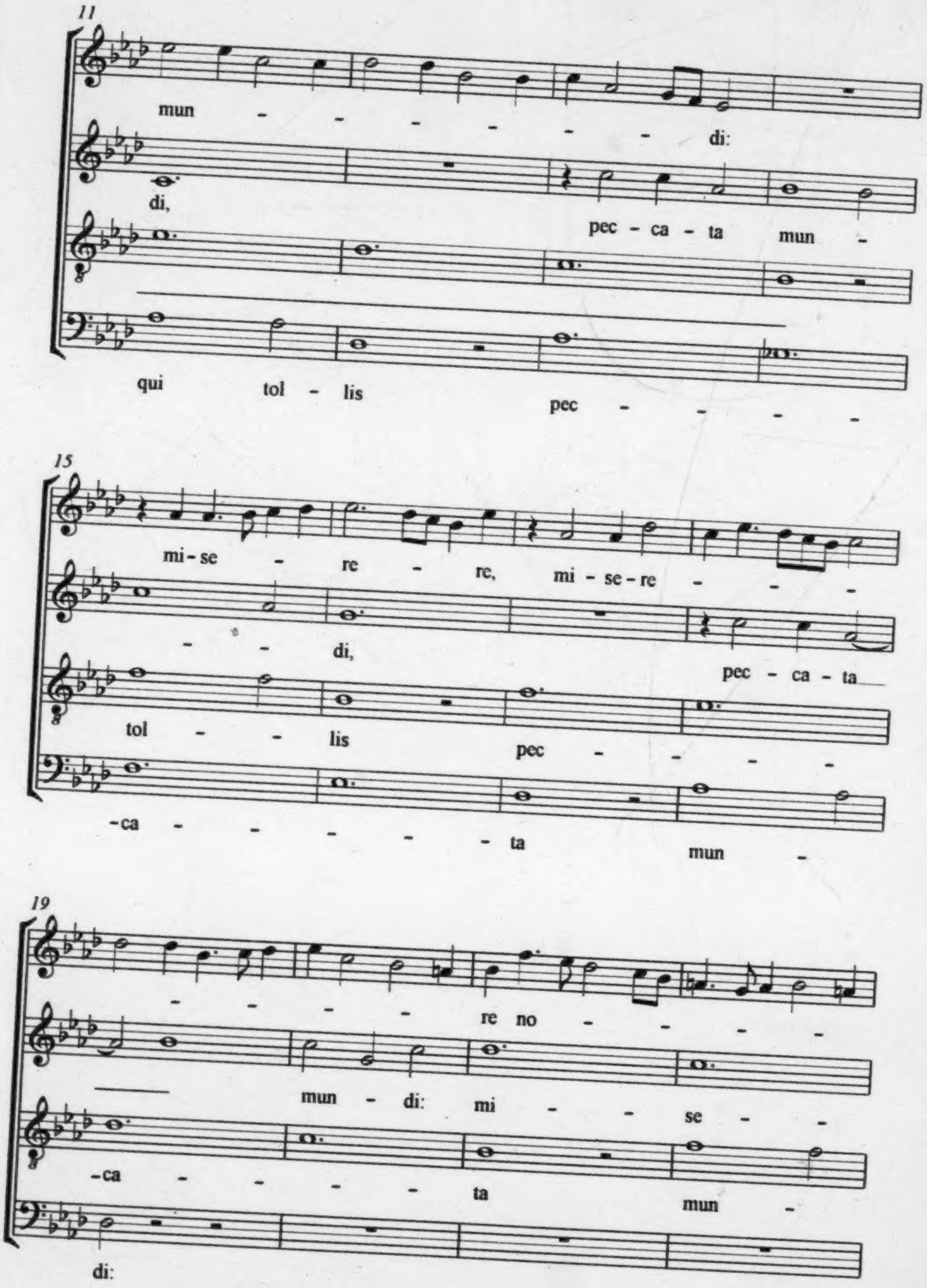

170
- - - - - - - - mi - ni.
- - - - - - mi - ni.
mi - - - - - - - - ni.
173
O - san - - -
O - san - - - - na, o -
178
O - san - - - - -
O - san - - - - -
- - na,
san - - - - na, o - san -

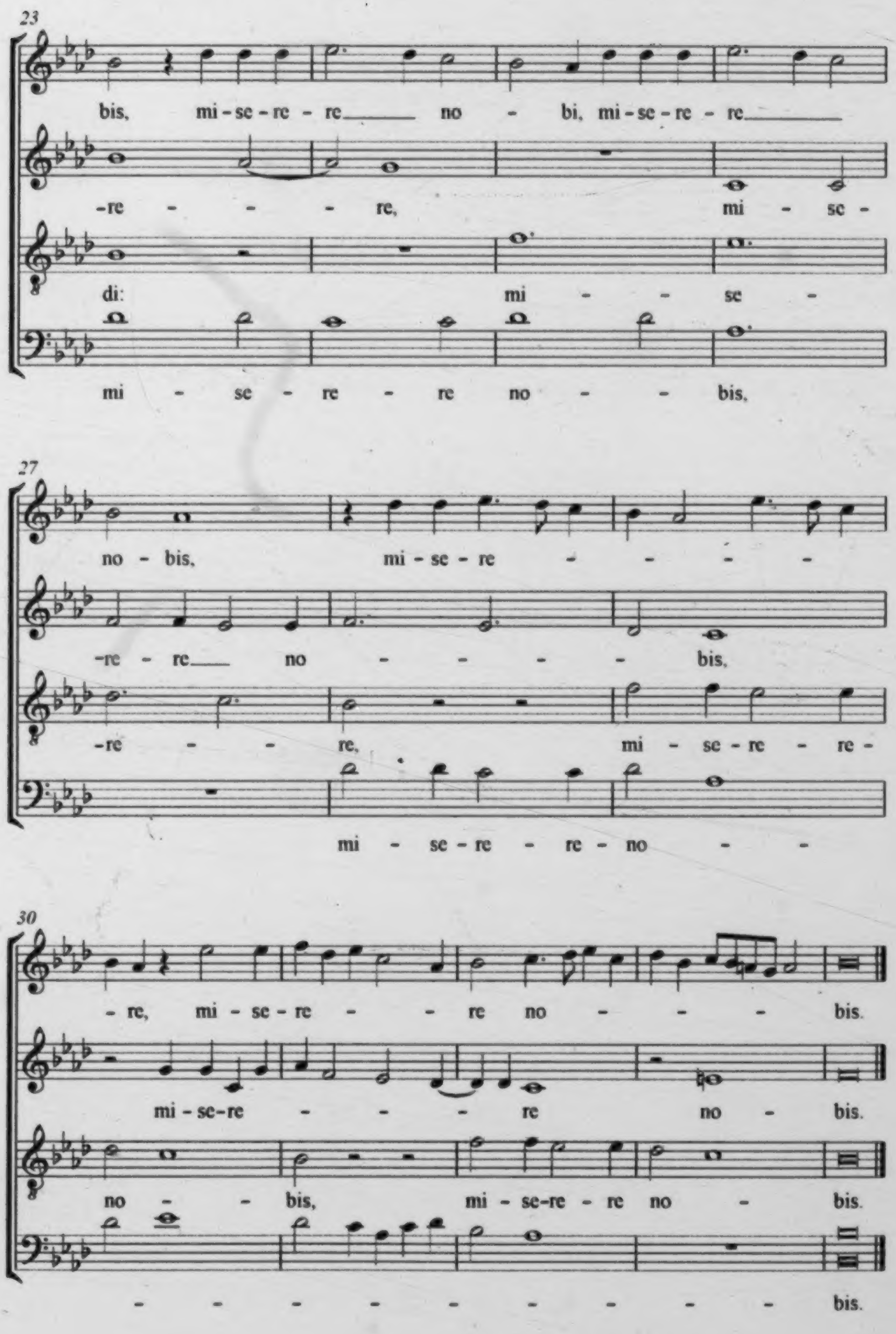

183
- - - - - - - - - -
- na, o - san -
o - - san - - - - na
- - na
187
- - na in ex -
- - na in ex - cel -
in ex - cel - - - sis,
in ex - cel - - - sis,
192
cel - - - - - - - -
- - sis, in ex - cel -
in ex - cel - sis,
in ex - cel - sis, in ex -


196
- - - sis, o - san - na in ex - cel -
sis, o - san - na in ex -
o - san -
cel - - - sis, o - san -
201
- - sis, in ex - cel - - -
cel - - - - sis, in ex - cel -
- na in ex - - cel -
-na in ex - cel -
205
- - - - - - - - sis.
- - - sis, in ex - cel - - - sis.
- - - - - - - - sis.
- sis, in ex - cel - sis.

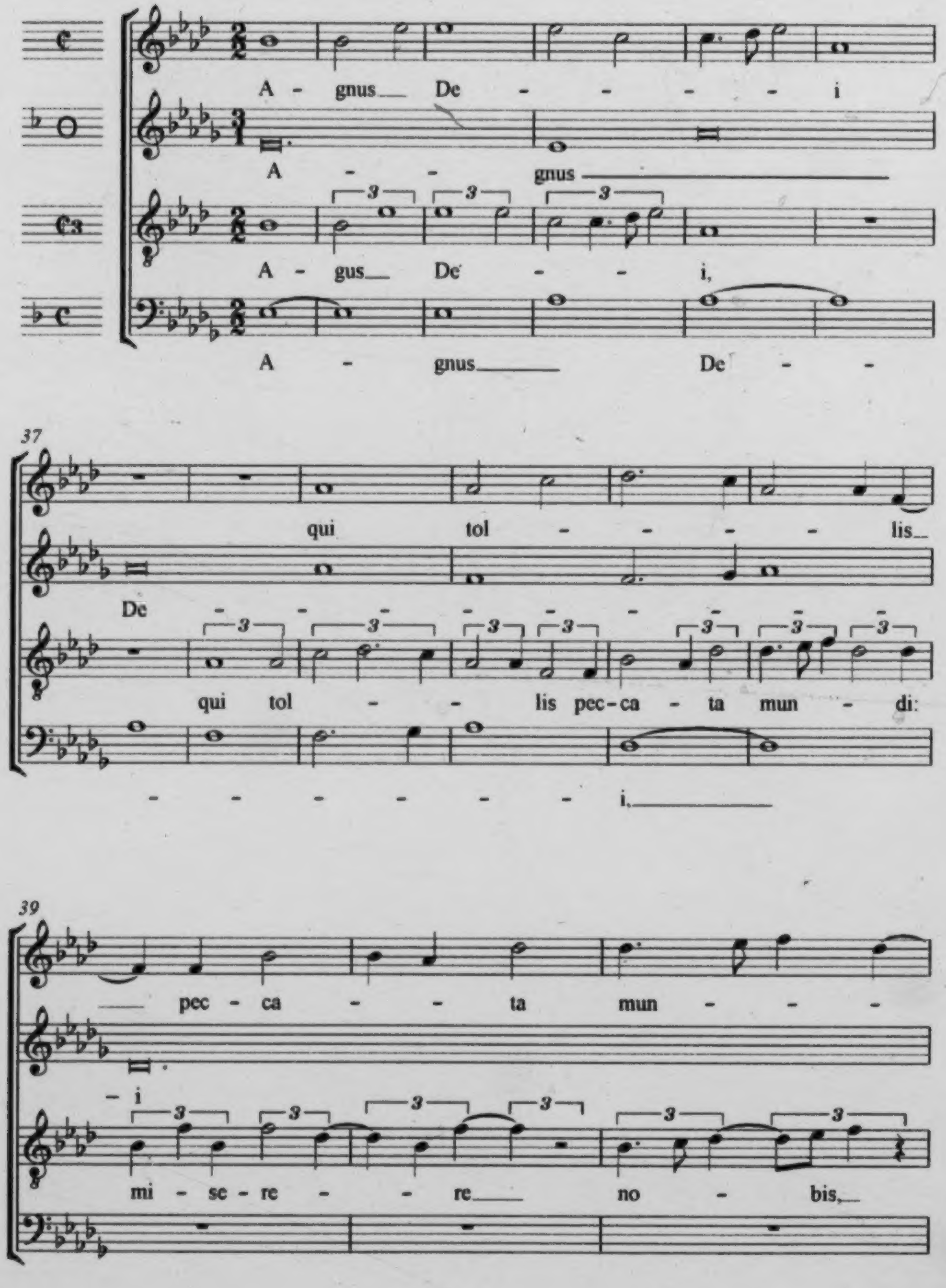
Agnus Dei I

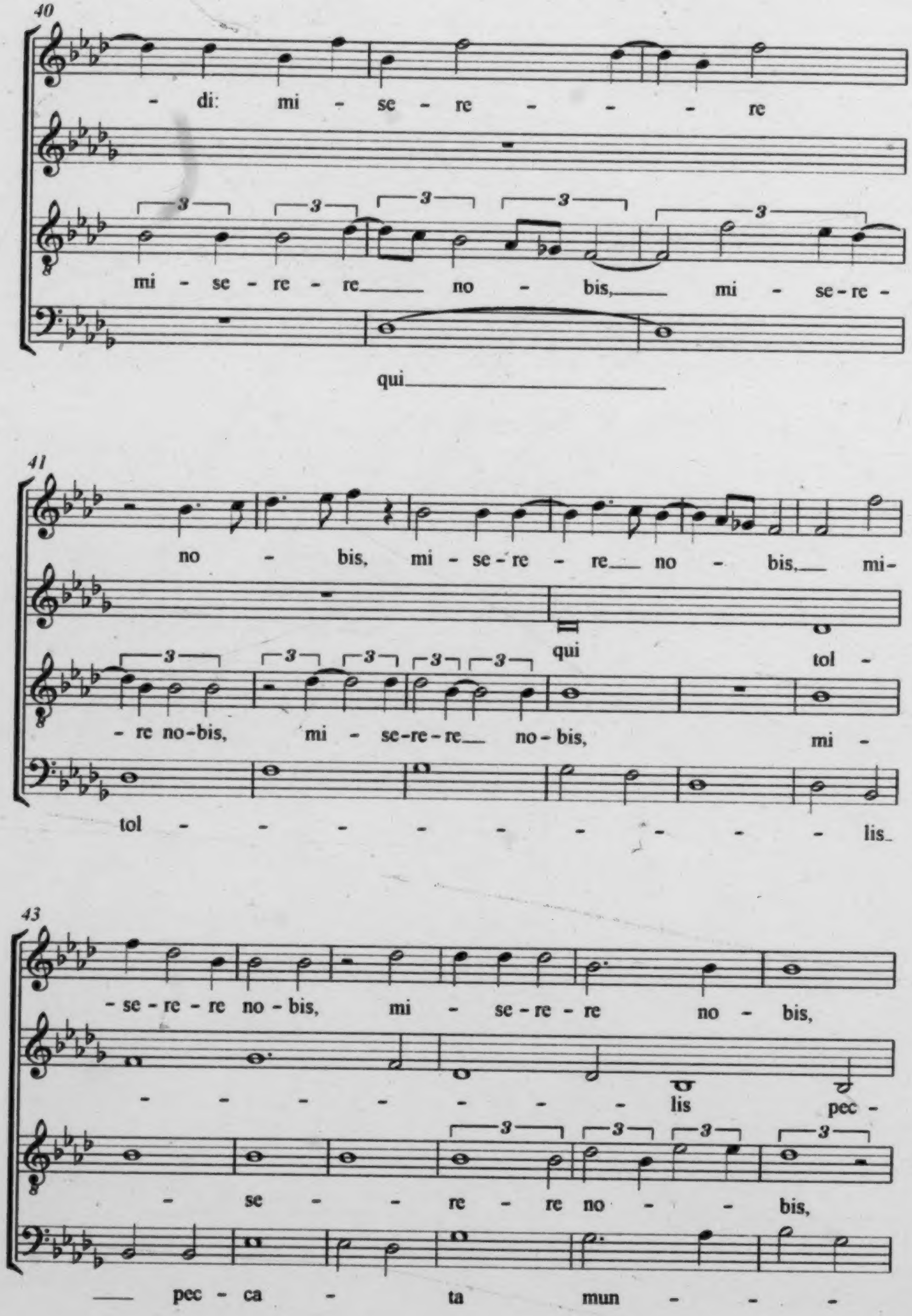

A - gnus De - - i qui
A - gnus De - -
A -
A - - gnus
5
tol - - - - lis pec - ca -
-i qui tol - lis pec - ca - - - -
- - - - - gnus
De -
8
- - - ta, qui tol - lis pec - ca - ta
- ta, pec - ca - ta mun -
De - - - i qui
- - - - - - - i

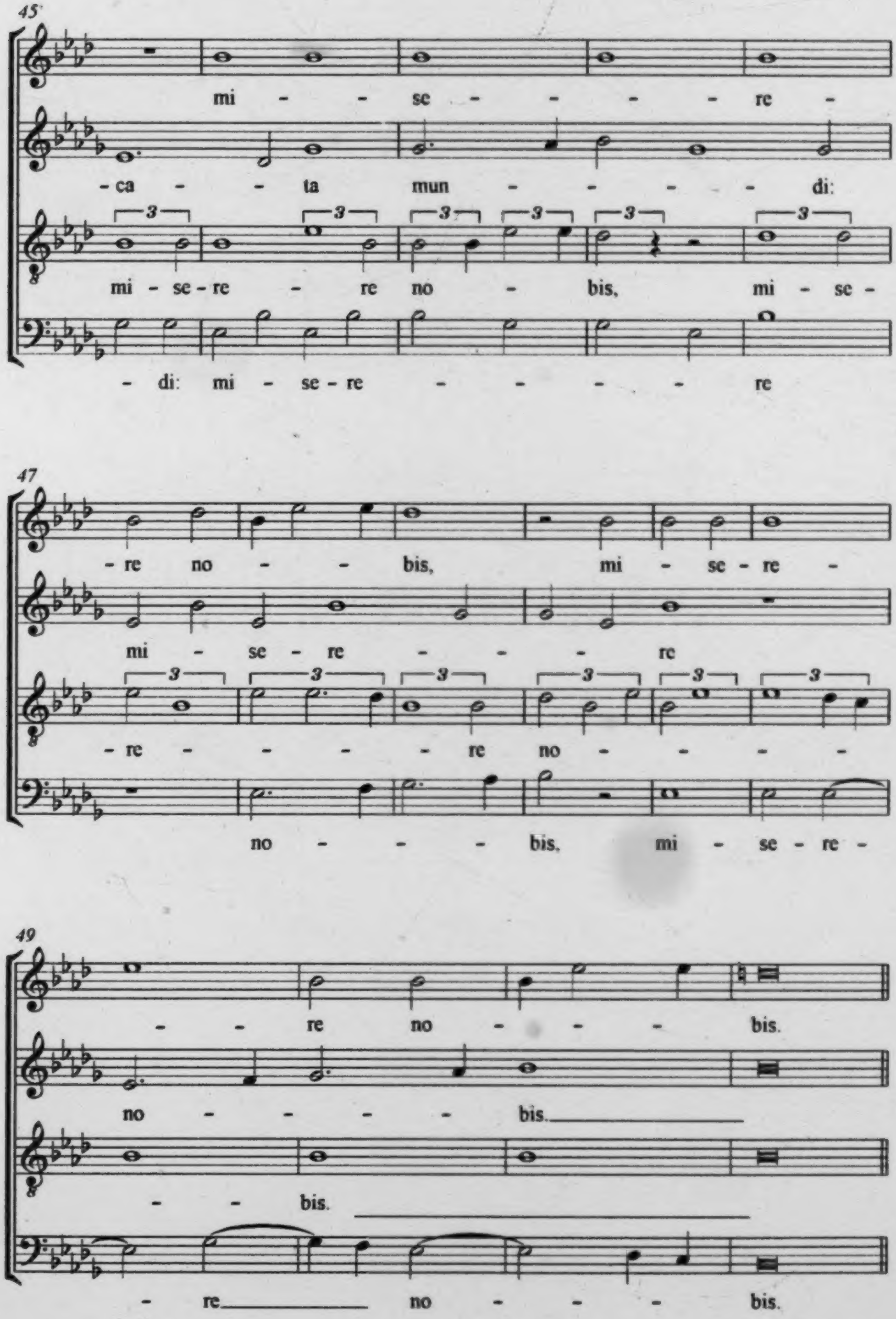

11
mun - - - - - - - di:
di, pec - ca - ta mun -
qui tol - lis pec - - - -
15
mi - se - re - re, mi - se - re - - - -
- - di, pec - ca - ta
tol - - lis pec - - - -
-ca - - - - - ta mun -
19
- - - - re no - - - -
mun - di: mi - - se - -
-ca - - - - ta mun -
di:


23
bis, mi - se - re - re no - bi, mi - se - re - re
-re - - - re, mi - se -
di: mi - - se -
mi - se - re - re no - - bis,
27
no - bis, mi - se - re - - - -
-re - re no - - - - bis,
-re - - re, mi - se - re - re -
mi - se - re - re - no - -
30
- re, mi - se - re - - re no - - - bis.
mi - se-re - - - re no - bis.
no - - bis, mi - se-re - re no - bis.
- - - - - - - - - bis.

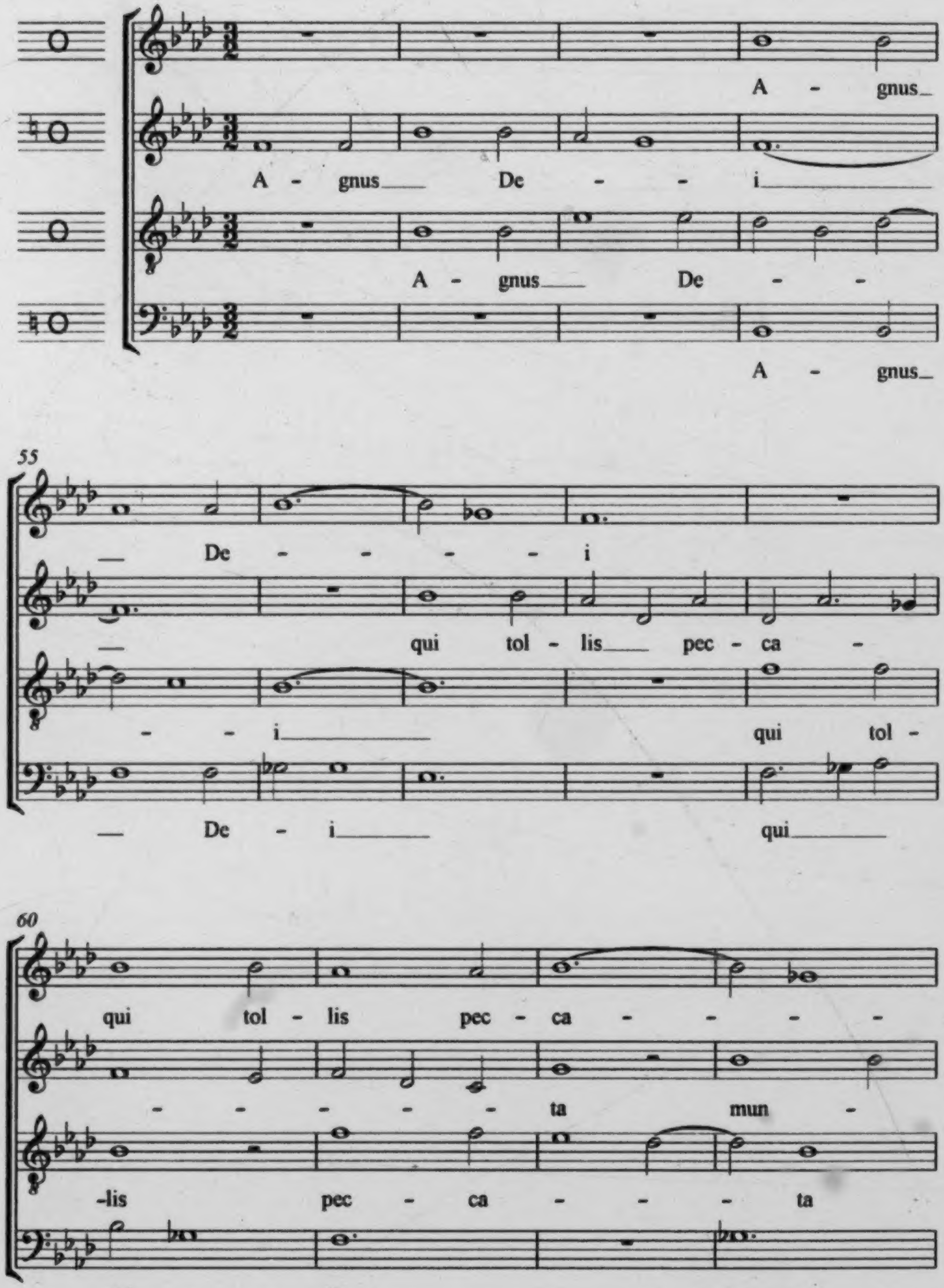
Agnus Dei II

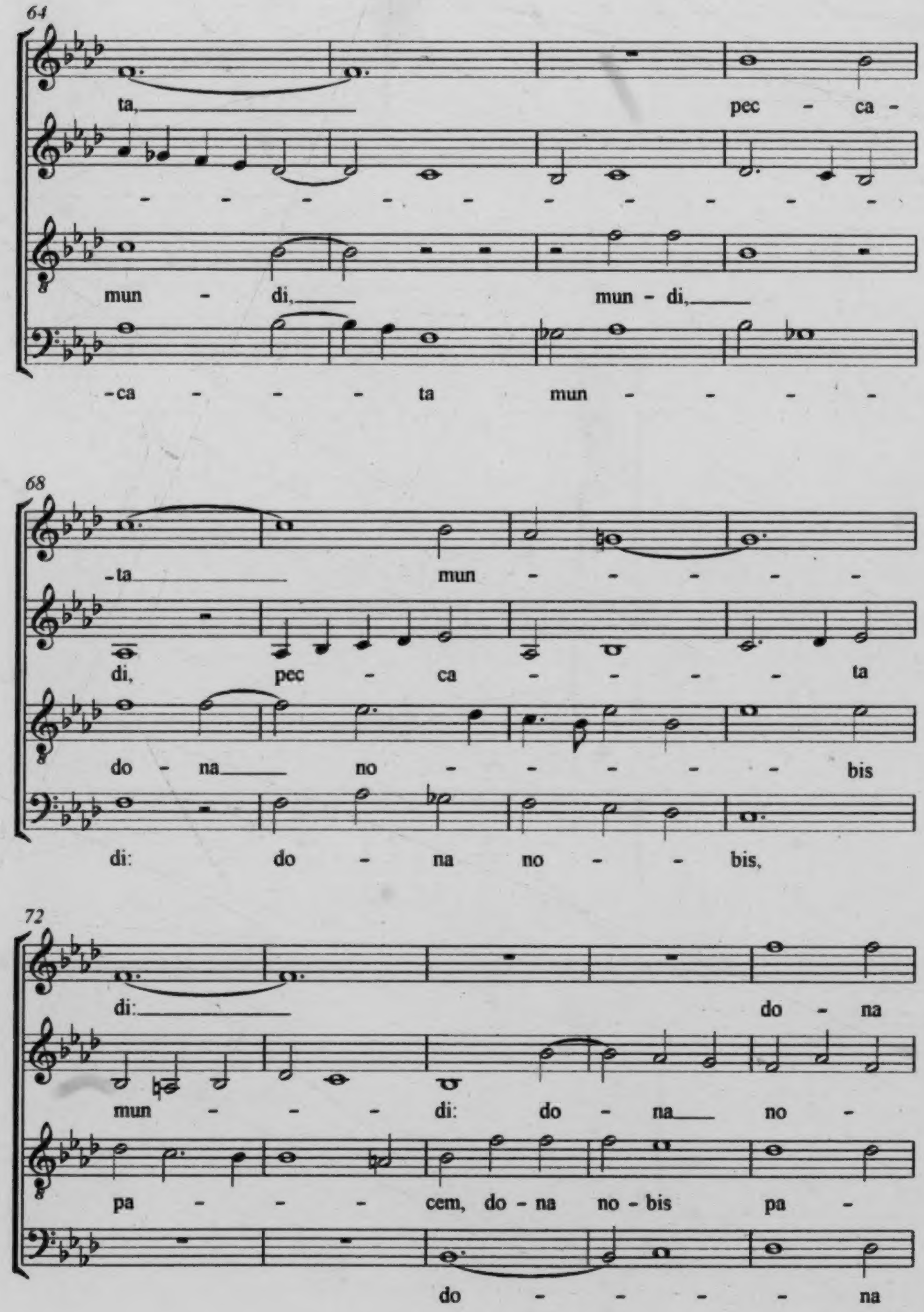

A - gnus De - - - - - i
A - - gnus
A - gus De - - i,
A - gnus De - -
37
qui tol - - - - lis
De - - - - - - - - -
qui tol - - lis pec-ca - ta mun - di:
- - - - - - i,
39
pec - ca - - ta mun - - -
- i
mi - se - re - - re no - bis,

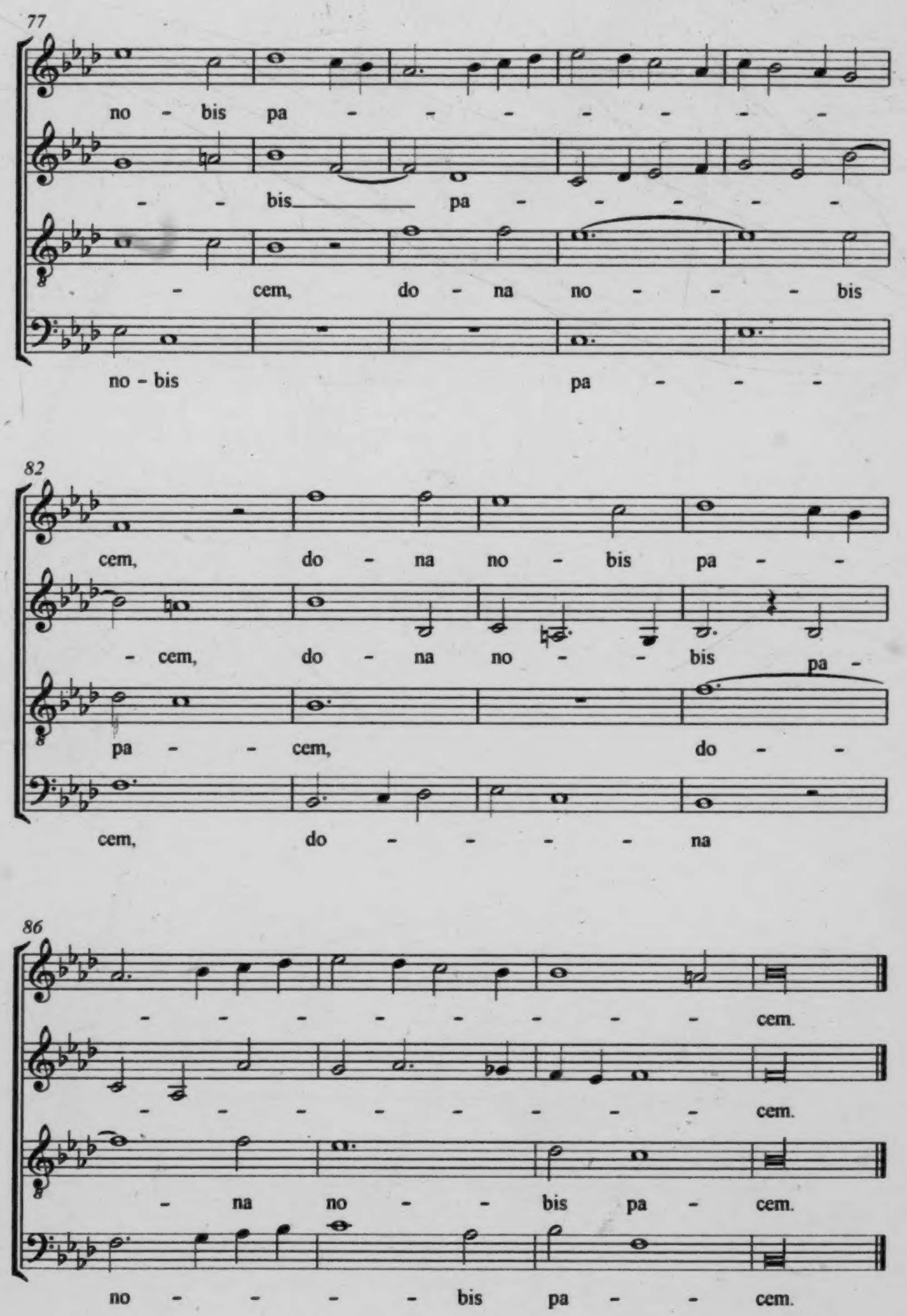

40
- di: mi - se - re - - - re
mi - se - re - re no - bis, mi - se - re -
qui
41
no - bis, mi - se - re - re no - bis, mi-
qui tol -
- re no - bis, mi - se - re - re no - bis, mi -
tol - - - - - - - - - lis
43
- se - re - re no - bis, mi - se - re - re no - bis,
- - - - - - - lis pec -
- se - - re - re no - - bis,
pec - ca - ta mun - - -


45
mi - - se - - - - re -
- ca - - ta mun - - - - - di:
mi - se - re - re no - bis, mi - se -
- di: mi - se - re - - - - re
3
47
- re no - - bis, mi - se - re -
mi - se - re - - - re
- re - - - re no - - - - -
no - - - bis, mi - se - re -
49
- - re no - - - bis.
no - - - - bis.
- - bis.
- re no - - - bis.

Agnus Dei III




64
ta, pec - ca -
- - - - - - - - - - -
mun - di, mun - di,
-ca - - - ta mun - - - - -
68
-ta mun - - - - -
di, pec - ca - - - - ta
do - na no - - - - - bis
di: do - na no - - bis,
72
di: do - na
mun - - - di: do - na no -
pa - - - cem, do - na no - bis pa -
do - - - - - na


77
no - bis pa - - - - - - - - -
- - bis pa - - - - -
- - cem, do - na no - - - bis
no - bis pa - - -
82
cem, do - na no - bis pa - -
- cem, do - na no - - bis pa -
pa - - cem, do - -
cem, do - - - - na
86
- - - - - - - - cem.
- - - - - - - - cem.
- na no - - bis pa - cem.
no - - - - bis pa - - cem.

CONCLUSION

In this thesis I have attempted to present and justify an interpretation of Pierre de la Rue's *Missa l'homme armé I* which is in keeping with the technical and aesthetic ideals of Renaissance performance practice, while at the same time bringing the work within the reach of a modern chamber choir.

In terms of chromatic alteration, the edition attempts to present as consistent a view as possible of this fascinating issue, whilst trying to balance theoretical pronouncements - reflected by treatises of the period - with practical considerations of how singers realised this music.

The very nature of the task attempted here has on occasions required a highly analytical approach, going well beyond the bounds suggested by what we know of Renaissance music theory. I believe, however, that this procedure is essential if we are to try to understand this music, and in a very real way it acts as a substitute for the practical experience of truly authentic performance practice – that is, actually being there – which we can never have. Modern scholarship has to try to make up for what is impossible to recapture.

If we can never truly place ourselves in the position of Renaissance singers, this does not mean that we should not try to comprehend their methods, and the scholarship to which I refer should therefore always be directed by a desire to understand the practicalities of the situation in which singers and composers found themselves.

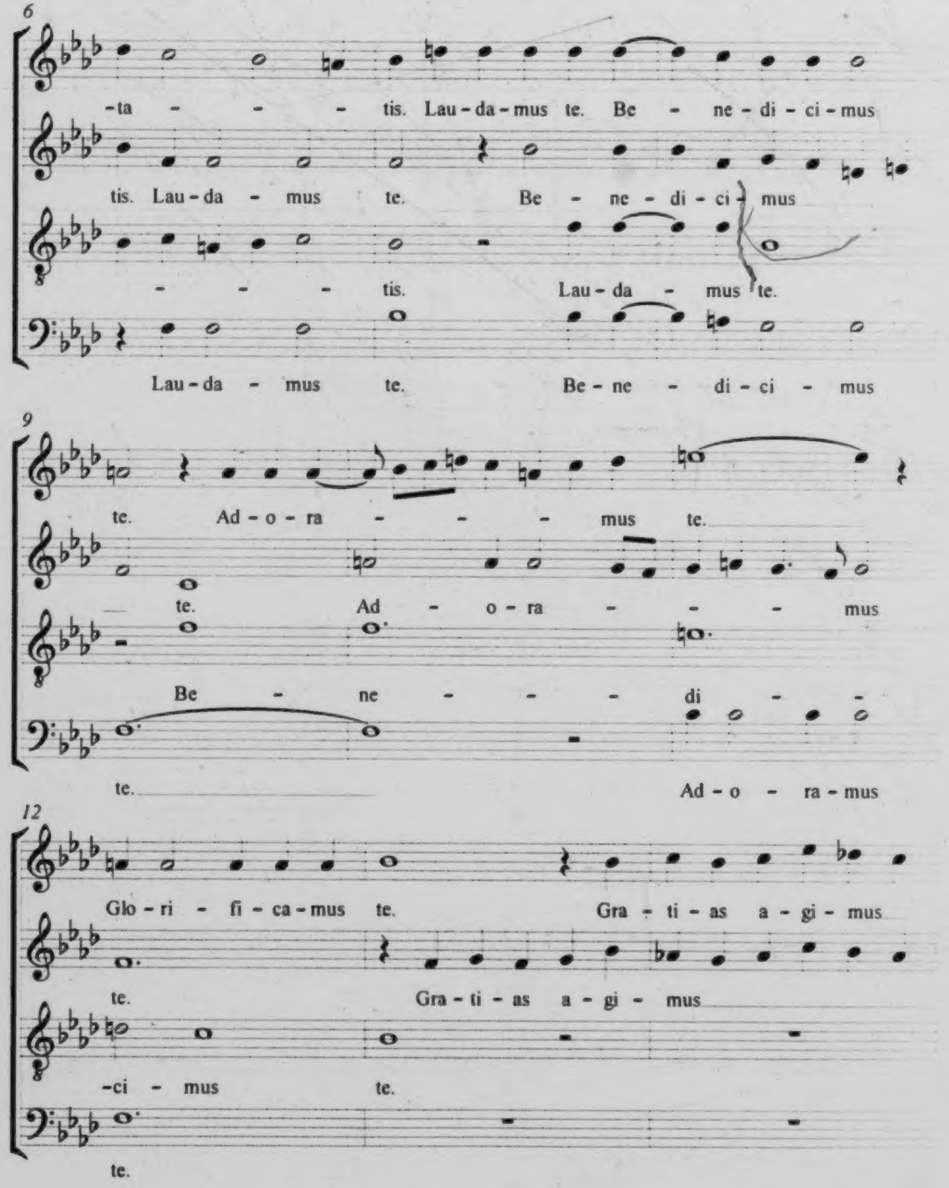
This is the approach I have attempted to adopt in preparing this thesis, which sprang originally from a basis in performance. Although research is continual, the six performances of the *Missa l'homme armé I* I have directed all predated the writing of parts A and B, and I am encouraged by the fact that only two minor alterations were found to be necessary after the performance stage was complete. While I am not suggesting that my interpretation of this Mass is the only correct one, I believe its unfailing success in a variety of performing situations does attest to its general validity as an integrated and convincing reflection of the composer's intention.

Pierre de la Rue has long been regarded as a major figure in a generation of composers probably unjustly overshadowed by Josquin des Prez. Without in any way wishing to diminish Josquin's standing, I believe la Rue's music, at its best, is of the same exalted quality. As more of this music is made available to modern audiences and performers, I am sure his stature will rise even further.

This is the real reason behind my advocacy of la Rue's music, and of the *Missa l'homme armé I* in particular. It is to be hoped my edition will, in some small way, contribute to greater recognition for this unique and wonderful composer.

APPENDIX

Gloria excerpt


6
-ta - - - tis. Lau - da - mus te. Be - ne - di - ci - mus
tis. Lau - da - mus te. Be - ne - di - ci - mus
- - - tis. Lau - da - mus te.
Lau - da - mus te. Be - ne - di - ci - mus
9
te. Ad - o - ra - - - mus te.
te. Ad - o - ra - - - mus
Be - ne - - - di - -
te. Ad - o - ra - mus
12
Glo - ri - fi - ca - mus te. Gra - ti - as a - gi - mus
te. Gra - ti - as a - gi - mus
-ci - mus te.
te.

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